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Early Experience Under Medicare+Choice: Final Summary Report

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EXECUTIVE SUMMARY

The Balanced Budget Act of 1997 (BBA 1997) established the Medicare+Choice (M+C) program, introducing substantial changes to Medicare managed care. The BBA 1997 expanded the types of MCOs that are eligible to contract with Medicare, changed the way they are paid, added mechanisms to give beneficiaries more information about their choices, and significantly expanded the scope of quality assurance and improvement requirements (Christensen 1998). Before 1997, enrollment in Medicare managed care was growing steadily and the majority of participating HMOs offered supplemental coverage, such as prescription drug benefits, at a low monthly premium, primarily in urban areas. However, since BBA 1997, many MCOs have left the program, and, among those that remained, benefit generosity has declined and premiums have increased. Most rural counties still do not have access to M+C MCOs. In this policy context, it is critical to gain a better understanding of how and why the BBA 1997 has affected MCO participation, performance, and beneficiary experience in Medicare managed care.

In September of 1998, CMS awarded a contract to Mathematica Policy Research, Inc., (MPR) to monitor and evaluate the performance of the M+C program. Over the past three years we have produced reports for CMS on various analyses developed from this monitoring effort. This report summarizes the results that have been produced from our monitoring system.

A. METHODOLOGY

Our analysis focused on the experience of MCOs and beneficiaries across 69 study markets. Of all Metropolitan Statistical Areas (MSAs) across the country where Medicare managed care is available, we studied those that had a population of at least 1.5 million or a Medicare managed care penetration rate of at least 30 percent. Sixty-nine MSAs met the criteria, and together they accounted for 74 percent of all Medicare managed care enrollees in 1998.

We have developed and tracked indicators for the study markets and have classified those markets by characteristics that we expected to influence the evolution of M+C (such as payment levels and Medicare managed care penetration rates). The focus on experiences in market areas is an important feature of this project. Market-specific factors play a major role in MCO entry and exit (Brown and Gold, 1999), as well as in the way in which managed care provider systems are structured and benefits are designed (Hurley et al. 1996). Across the 69 study markets, we have tracked changes in MCO availability, benefits, premiums, payment rates, enrollment, disenrollment, and profitability, as well as HEDIS[®] and CAHPS indicators of the quality of care delivered.

B. AVAILABILITY OF M+C MCOs

Between 1999 and 2001 MCO participation in the M+C program declined dramatically, with half the number of MCOs serving the 69 study markets in 2001 compared with the program's peak in 1998. Nationally, the number of M+C contracts fell from a high of 346 in 1998 to 179 in 2001.

In 1998, 62 of the study markets had at least three MCOs participating in the M+C program. By 2001, this was true for only 42 of the study markets. Over that period, three study markets

lost all their M+C MCOs, and six had just one participating M+C MCO by 2001. Eleven of the study markets saw the number of participating MCOs decline from five or more to just two.

As a result, Medicare beneficiaries in most markets have fewer M+C MCOs to choose from in 2001 than they did before BBA 1997. In 1997, three-fourths of Medicare beneficiaries in the study markets had five or more M+C contracts to choose from; in 2001, only one-third did. Over the same period, the proportion of Medicare beneficiaries with no M+C contracts available in these 69 markets grew from 1 percent to 4 percent, and the proportion with only one M+C contract available grew from 4 percent to almost 9 percent.

1. Contract Withdrawals and Service Area Reductions

Nationally, the number of enrollees affected by contract nonrenewals and service area reductions grew from 409,295 in 1999 to 943,856 in 2001, and more than 500,000 will be affected in 2002. In 1999, 7 percent of enrollees were affected by contract nonrenewals and service area reductions; this grew to 15 percent in 2001. The impact of contract withdrawals was widespread, and few of the study markets were left untouched by 2001. Only 7 of the 69 markets had no contract withdrawals between 1999 and 2001. In 20 of the 69 markets, more than 30 percent of beneficiaries were affected by contract withdrawals in one of those 3 years.

M+C MCOs are pulling out of mid- to high payment rate markets as well as the low payment rate markets. Mid- to higher payment rate markets tend to have a larger number of participating MCOs, and we find that MCO pullouts appear to have occurred with somewhat greater frequency in these markets than in low payment rate markets (where the M+C payment rate falls below the USPCC). MCOs that did not renew their contracts were smaller on average than those that did renew across the 1999 to 2001 period. Nonrenewing contracts tended to have entered Medicare managed care more recently than renewing contracts, and a larger share of nonrenewing contracts were for profit.

C. TRENDS IN GENEROSITY OF BENEFITS

Across the 69 study markets, many M+C MCOs reduced the generosity of their benefits and increased monthly premiums over the 1999-to-2001 period. And despite the narrowing gap in M+C payment rates across counties following BBA 1997, substantial cross-market variation in the generosity of benefits remained. Still, we find that in most of our study markets, M+C MCOs continue to offer some prescription drug coverage at a monthly premium well below Medigap rates. The analysis is based on the basic benefit packages that M+C contracts offer in the 69 market areas. For each market area, our analysis focused on the basic packages offered in the county with the largest number of Medicare beneficiaries.

Many M+C MCOs in the 69 markets reduced benefits, increased premiums, or both. Across the 69 markets, the proportion of basic packages offering prescription drug coverage declined from 88 percent in 1999 to 63 percent in 2001. Declines were also seen in the proportion of basic packages covering eye exams, hearing exams, and dental care. In 1999, 81 percent of the basic packages offered charged no premium. By 2001, only 45 percent of the basic packages charged no premium, 24 percent had a premium of \$26 to \$50 per month, and 21 percent charged a premium of more than \$50 per month. Very few M+C MCOs offered an unlimited drug

benefit. Only 16 of the 256 basic benefit packages across the 69 study markets offered an unlimited drug benefit. The average drug cap in 2001 was \$1,269.

These changes had an impact on benefit generosity that varied by market. Based on the benefits offered by M+C MCOs in the largest county within each of our study markets, we find that in 24 of our 69 study markets, benefits were generous in 1999, and remained fairly generous in 2001. In these markets at least two M+C MCOs continued to offer drug coverage and other supplemental benefits at a monthly premium of zero to \$25 in 2001.¹ An additional 18 markets had generous benefits in 1999, and more modest benefit levels in 2001 with two M+C MCOs offering drug coverage at a monthly premium of \$30 to \$55 in their basic benefit package.² Together these 42 markets accounted for 84 percent of M+C enrollees across the study markets in 2001 (though some M+C enrollees in these markets may have had basic benefit packages less generous than this).

Eleven of the study markets saw a substantial decline in benefit generosity over the 1999-to-2001 period— drug coverage was no longer available in most of these markets in 2001, and when it was offered, the premium was at least \$60 per month. These 11 markets together accounted for 10 percent of M+C enrollees across the study markets in 1999. In addition, three of the study markets lost their only participating M+C MCO. In 11 study markets, the generosity of supplemental benefits was limited throughout the 1999-to-2001 period. Most M+C MCOs in these markets did not offer drug coverage in their basic benefit packages.³

Benefit generosity is related to M+C payment rates. Throughout the 1999-to-2001 period, the majority of MCOs in markets where the M+C payment rate is lower than the USPCC did not offer prescription drug coverage in their basic packages. At the same time, the majority of MCOs participating in markets where the payment rate exceeds the USPCC did offer such coverage in their basic package.

¹ In 31 of these markets, all participating M+C MCOs offered prescription drug coverage at no monthly premium in 1999. Markets were considered to have generous benefits in 1999 if at least 70 percent of the participating M+C MCOs offered prescription drug coverage at a monthly premium of \$25 or less in 1999.

² Or, alternatively, only one MCO was available in the market, and it offered drug coverage at a premium of \$25 or less.

³ Two of the study markets had no M+C contracts over the 1997 to 2001 period. These two markets were selected for this study because they had a managed care penetration rate above 30 percent through cost and HCPP contracts (Dubuque, Iowa and Grand Junction, Colorado).

Actuarial Research Corporation analyzed the benefits offered under the basic (lowest premium) packages in the largest counties across 16 case study markets.⁴ The actuarial analysis allows for a summary interpretation of the overall trends in the value of benefits, cost sharing, and premiums across these markets. As expected, M+C enrollees enjoy substantially lower cost sharing for benefits traditionally covered by Medicare than FFS enrollees with no supplemental coverage. M+C enrollee cost sharing for health services traditionally covered by Medicare came to 3.6 percent of the value of those services in 2001 across the 16 case study markets, or \$24 per month. In contrast, Medicare fee-for-service (FFS) beneficiaries with no supplemental coverage pay for 12.8 percent of the value of traditional health services, on average, or \$85 per month. Despite the supplemental coverage available through M+C MCOs for services that traditional Medicare does not cover (like prescription drugs), M+C enrollees still pay for about half of the cost of those health services.⁵ The share of supplemental health services for which enrollees pay rose from 1999 through 2001, from 46 percent of the value of these services in 1999 to 53 percent in 2001 (or from \$68 to \$91 per month). Average monthly out-of-pocket expenditures, which include cost sharing plus any monthly M+C premium, came to \$85 in 1999, and rose to \$130 in 2001 across these 16 markets. In 2001, in 10 markets, enrollee out-of-pocket expenditures exceeded \$150 per month.

D. ATTRACTIVENESS OF M+C OPTIONS TO MEDICARE BENEFICIARIES

Despite the substantial decline in MCO participation, enrollment in the M+C program in 2001 was only 8 percent below its 1998 peak. Still, this is a dramatic reversal from the continuing upward trend in Medicare managed care enrollment before BBA 1997. Further, an increasing number of those choosing to leave M+C MCOs returned to FFS Medicare over the 1998-to-2001 period. Quarterly voluntary disenrollment rates increased only slightly from 1998 through 2001 across the study markets, from 2.5 percent to 4.1 percent.⁶ However the proportion of voluntary disenrollees returning to FFS Medicare increased dramatically, from 30 percent in 1998 to 45 percent in 2001. For 44 of the 69 case study markets in 2001, more than half of the voluntary disenrollees returned to FFS Medicare.

A similar trend is seen for enrollees affected by contract withdrawals (including both contract nonrenewals and service area reductions). The proportion of enrollees affected by

⁴The 16 case study markets are Albuquerque, New Mexico; Baltimore, Maryland; Boston, Massachusetts; Cincinnati, Ohio; Cleveland, Ohio; Houston, Texas; Kansas City, Missouri; Los Angeles, California; Miami, Florida; Minneapolis, Minnesota; New Orleans, Louisiana; New York, New York; Phoenix, Arizona; Portland, Oregon; Seattle, Washington; and Tampa, Florida.

⁵ In the actuarial model, these services include prescription drugs, dental services, chiropractors, podiatrists, eye exams, glasses, hearing exams, and hearing aids. If the MCO does not cover the service, then the enrollee's cost sharing amount is 100 percent.

⁶ Voluntary disenrollees include only those who chose to leave their M+C MCO. We do not include people who died, who moved out of the area or those whose who were affected by contract withdrawals in our count of voluntary disenrollees.

contract withdrawals who returned to FFS Medicare increased from 21 percent in 1999, to 34 percent in 2000, and finally to 52 percent in 2001. In 2001, in three markets, more than 95 percent of enrollees in withdrawing MCOs returned to FFS Medicare. After removing those markets where no other M+C option was available from the estimate, the percentage of enrollees in withdrawing MCOs returning to FFS Medicare was 47 percent in 2001—close to the proportion of voluntary disenrollees returning to FFS Medicare in that year.

E. MCO PERFORMANCE ON QUALITY AND ACCESS TO CARE

We examined how the performance of Medicare MCOs varied across the 69 study markets using quality indicators constructed from two data sources: (1) the Medicare Consumer Assessment of Health Plans Survey (CAHPS) and (2) the Medicare Health Plan and Employer Data Information Set (HEDIS[®]). We constructed market-level quality indicators from both of these sources for 1998 and 1999. We found considerable variation in performance across our study markets for most of these quality indicators. We focus primarily on our 1999 estimates because the overall performance across the 69 markets does not change much between the two years.

From the CAHPS survey, we constructed the following five indicators: (1) rating of overall plan performance, (2) doctor's listening ability during visits in the past six months, (3) problems in obtaining a referral to access a specialist in the past six months, (4) helpfulness of customer service during the past six months, and (5) delivery of flu shot by health plan or personal doctor last winter. We find that Medicare managed care enrollees give a relatively strong assessment of the care they receive through their MCO. About 80 percent of enrollees across the 69 markets ranked their health plan with a rating of 8 or above in 1999 (on a scale of 1 to 10) and 94 percent who had visited their doctor reported that their doctor usually or always listened carefully. Results on access to specialty care were not as strong. Across the study markets, 19 percent of enrollees who felt they needed to see a specialist had some problem obtaining a referral in 1999. And in the lowest-performing markets on this measure (at the 10th percentile and below), 24 percent to 32 percent of these enrollees had problems obtaining a referral.

Several markets did not perform well on the three HEDIS[®] measures examined: (1) the proportion of enrollees with at least one ambulatory care visit in the past year, (2) the proportion of female enrollees ages 65 to 69 receiving a breast cancer screening during the past two years, and (3) the proportion of diabetics receiving annual eye exams. While in half the study markets, almost 90 percent or more of enrollees had at least one ambulatory visit in 1999, that measure was as low as 52.5 percent to 77 percent for those markets ranked in the 10th percentile and below on this measure. For women ages 65 to 69, at least 74 percent received a breast cancer screening in half of the 69 markets. However, only 55 to 63 percent did so in those markets ranked in the 10th percentile and below on this measure. The results for eye exams for diabetics were relatively low in more than half of the study markets. At the 50th percentile, only 64 percent of diabetics received an annual eye exam in 1999. And for those markets at the 10th percentile and below, only 18.3 to 49.4 percent of diabetics received an annual eye exam.

While most of the study markets showed a strong performance on the ambulatory care measure, a significant number of markets did not perform well on the breast cancer screening and diabetic eye exam measures. These latter two indicators are subject to greater measurement

error at the MSA level, partly because MCOs are not required to report this data for all continuous enrollees that meet the criteria, as they are for ambulatory care visits. For these two measures, some MCOs have relatively few HEDIS observations at the MSA level, although their share in total Medicare managed care enrollment in the MSA level is substantial. Nonetheless, these results indicate that some MCOs across our study markets might need to improve performance in the quality of care they deliver.

Five markets were ranked among the top performers on both the HEDIS[®] and CAHPS measures: Dubuque, Iowa; Medford Oregon; Killeen Texas; State College, Pennsylvania; and Williamsport, Pennsylvania. The first three of those five markets all had a large share of Medicare managed care enrollees in cost contracts. And overall, 7 of the 11 high-ranking markets across our three HEDIS[®] measures had a large share of enrollees in cost contracts. The payment system under Medicare cost contracts gives MCOs no incentive to contain health care costs, which could contribute to the strong performance of MSAs with a large Medicare cost MCO presence.

F. FINANCIAL VIABILITY OF M+C MCOs

The profitability of M+C MCOs did not change significantly between 1998 and 1999 based on M+C MCO self-reported financial data. (Self-reported financial data for 2000 has only recently become available and was not analyzed for this project). Profit margins were slightly negative across many of the study markets in both 1998 and 1999. The results of our actuarial analysis of plan benefits over the 1999-to-2001 period indicates that M+C MCO revenues (the sum of monthly payment rates plus any premium) rose more slowly across 10 of the 16 case study markets than did the estimated value of the benefits provided. Together these results suggest that in more recent years many M+C MCOs experienced a cost squeeze as M+C payment rates rose more slowly than the cost of providing health benefits.

G. TROUBLED MARKETS

In 20 of the 69 study markets, more than 30 percent of M+C enrollees were affected by contract withdrawals and service area reductions in a single year during the 1999-to-2001 period. We examined what factors, if any, distinguish these 20 markets from more stable markets over the period.⁷ We define a study market to be stable if no more than 5 percent of beneficiaries were affected by contract nonrenewals and service area reductions in a single year.⁸ Under that definition, 22 of our study markets were stable. We compared our indicators of M+C program performance and market characteristics, including M+C MCO availability, benefit generosity,

⁷ We chose the threshold level of 30 percent of M+C enrollees affected by withdrawals in a single year to define a troubled market both because a break in the data appears at this point, and because we wanted to limit the number of markets defined as troubled to the most severe cases.

⁸ For most of the stable markets, no more than 2 or 3 percent of beneficiaries were so affected in any given year.

enrollment, disenrollment, M+C payment rates, and the quality of care delivered for these 20 troubled markets against those same indicators for the 22 relatively stable markets.

Troubled markets were initially similar, on average, to stable markets in the dimensions of benefit generosity, the number of participating MCOs, and market concentration. Troubled markets differed initially from stable markets in that they were smaller—none of the troubled markets had more than 100,000 M+C enrollees, whereas ten of the stable markets exceeded that size. And troubled markets had a lower average level of M+C penetration than the stable markets in 1998. Benefit generosity declined much more rapidly in the troubled markets compared with the stable markets over the 1999-to-2001 period. And not surprisingly, as a result of the MCO withdrawals, the number of participating MCOs fell, as did the M+C penetration rates across the troubled markets. Market concentration increased in the troubled markets over the 1999-to-2001 period whereas it declined slightly in the stable markets.

The average voluntary disenrollment rate was somewhat higher across the troubled markets compared with the stable markets across the 1998-to-2001 period. And as beneficiaries reacted to the instability in these markets, a higher proportion of voluntary disenrollees returned to FFS Medicare in the troubled markets, on average. The HEDIS[®] and CAHPS indicators for 1999 show that the quality of care delivered in troubled markets was similar to that delivered across the stable markets. The averages and ranges on the quality indicators were similar for these two sets of markets, indicating that, as of 1999, the quality of care delivered did not appear to be affected by the pressures that caused many M+C MCOs to leave the troubled markets.

H. CONCLUSION

Prior to BBA 1997, enrollment in Medicare managed care was growing, and many of its enrollees had access to prescription drug benefits at no monthly premium. Yet Medicare managed care was primarily an urban program, as many rural counties (where payment rates are much lower) did not have any participating MCOs. In addition, wide variation existed in the generosity of benefits across those counties where Medicare managed care was available. In attempting to reduce these disparities, the BBA 1997 increased the payment rates in some mainly rural counties to a floor level and expanded the types of organizations that are eligible to participate. However, it did not succeed in reducing the geographic inequities in the availability of Medicare managed care or in the generosity of benefits. Rather, over the 1999-to-2001 period, many M+C MCOs exited the program and the majority of those that remained either reduced their benefits, increased their premiums or both. Some of our study markets were hit much harder by these changes than others, and this was partly a function of payment rates. Enrollment in Medicare managed care declined for the first time in 2000.

These are signs of a program in trouble. The decline in M+C MCO participation and benefit generosity is not surprising given the low rate of increase in M+C payment rates for many counties following BBA 1997. Beneficiaries have reacted to these changes as an increasing proportion of enrollees affected by contract withdrawals are returning to FFS Medicare, as are voluntary disenrollees. Yet, while the changes brought about by BBA 1997 are problematic, M+C MCO benefits still compare favorably to traditional Medicare supplemented with Medigap coverage and performance on quality indicators is generally good. While there is some room for improvement in the quality of care delivered in some of our study markets, across the majority of

those markets, M+C MCOs continue to deliver health care services of solid quality and to offer prescription drug coverage at a reasonable monthly premium (averaging \$24 per month). Medicare managed care therefore remains an important source of supplemental coverage, particularly for Medicare beneficiaries who lack employer-based coverage and do not have access to Medicaid. As M+C MCO withdrawals expected for 2002 continue to be high, though less than in 2001, policymakers need to consider how to bring stability to this program.

I. INTRODUCTION

The Balanced Budget Act (BBA) of 1997 established the Medicare+Choice program, which substantially changed the payment system for Medicare managed care organizations (MCOs) and expanded the types of organizations authorized to participate in the program. This report examines the changes in availability of Medicare managed care organizations and the benefits they offer since the beginning of the M+C program. In examining the performance of the M+C program, we highlight the strengths and weaknesses of Medicare managed care as it has evolved since 1997. Our results indicate that the BBA 1997 has contributed to a decline in benefit generosity and to the exit of many MCOs from the program. At the same time, Medicare managed care continues frequently to provide high quality, cost-effective care and coverage beyond what traditional Medicare provides.

Medicare beneficiaries frequently join Medicare MCOs to gain protection from the costs that traditional Medicare does not cover. Previous research has found that Medicare HMO enrollees have a lower average income than those who remain in Medicare fee-for-service (FFS) programs (Nelson 1996; Brown 1993). Therefore the lower copayments for traditional Medicare services and additional benefits that M+C MCOs offer are important features that not only attract enrollees to this program, but might also help to increase access to health care services, particularly for low-income beneficiaries.

A. OVERVIEW OF CHANGES INTRODUCED BY THE BALANCED BUDGET ACT OF 1997

The BBA 1997 expanded the types of MCOs that are eligible to contract with Medicare, changed the way they are paid, added mechanisms to give beneficiaries more information about their choices, and significantly expanded the scope of quality assurance and improvement

requirements (Christensen 1998). Effective January 1, 1999, the M+C program authorized three kinds of plans to be offered: (i) coordinated care plans, which include HMOs, preferred provider organizations and provider-sponsored organizations (ii) Private fee-for-service organizations, and (iii) Medical Savings Accounts. However, very few new types of organizations have entered the M+C program. To date, only one private fee-for-service organization has entered the M+C program and no Medical Savings Accounts are available. Our analysis therefore focuses on coordinated care plans, all but four of which are HMOs.

Before the BBA 1997, the Centers for Medicare and Medicaid (CMS) paid Medicare MCOs 95 percent of an estimated amount of what the Medicare program would have paid had these enrollees remained in traditional Medicare [the adjusted average per capita cost (AAPCC)]. Under the new payment method, the capitation rate for a given county is set at the highest of three amounts:

1. A blend of local and national rates
2. A floor rate, which was set at \$367 in 1998, rose to \$415 in January 2001 [under the Benefits Improvement and Protection Act (BIPA), the floor is \$525 as of March 1, 2001 in large urban areas and \$475 elsewhere].
3. A minimum update, equal to a 2 percent increase from the previous year's rate (increased by BIPA to 3 percent for March through December of 2001).

Before the BBA 1997 and the Medicare+Choice program, enrollment in Medicare managed care was growing, as was participation by MCOs. Following the BBA 1997, many MCOs found that the annual increase in their payment rates did not keep pace with rising health care costs. Many MCOs responded by either reducing the generosity of their benefits, increasing premiums, or by leaving the program altogether. Enrollment in Medicare managed care actually declined for the first time in 2000, and that downward trend continued through 2001 (Figure 1.1).

B. OBJECTIVES OF THIS PROJECT

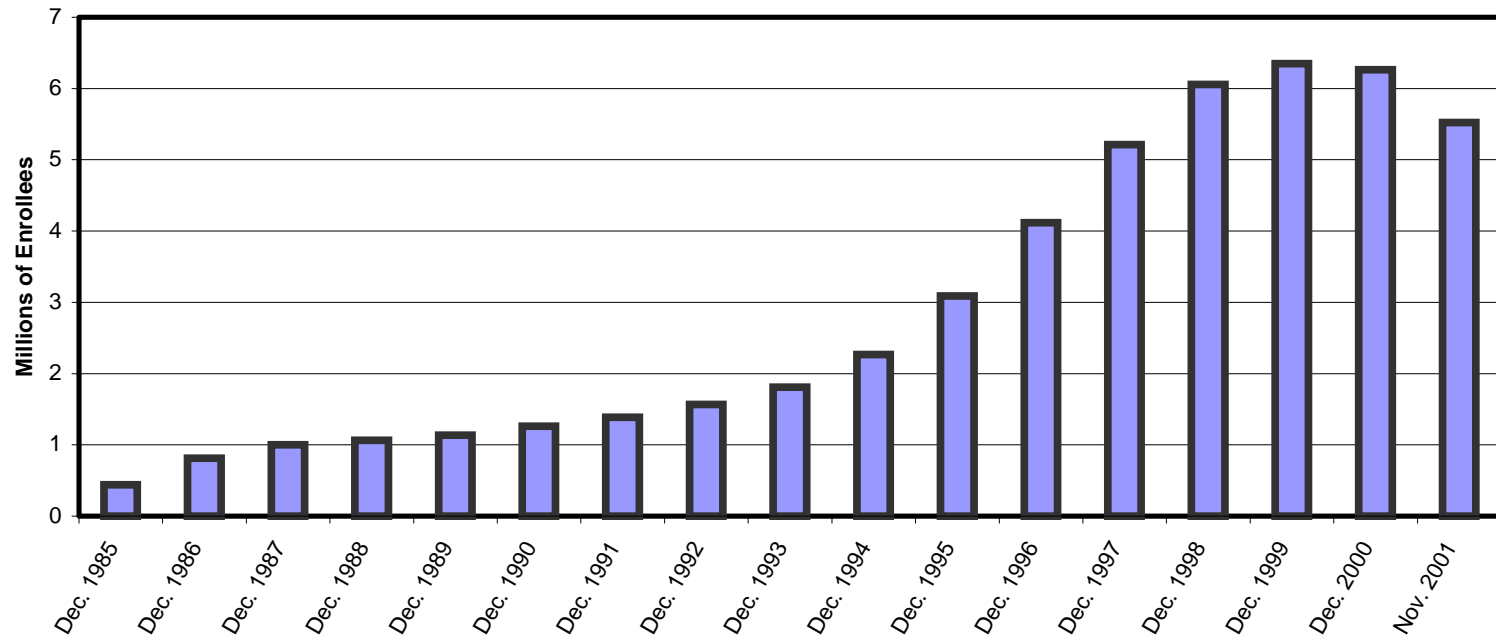
In September of 1998 CMS awarded a contract to Mathematica Policy Research, Inc. (MPR) to monitor and evaluate the performance of the M+C program. This report summarizes the results from our monitoring system, which tracks key indicators of M+C program performance over the 1998 to 2001 period. The indicators were constructed from data available to CMS through its administrative systems as well as new data CMS collected after the passage of the BBA. These indicators are constructed at the market level and include the availability of M+C contracts, enrollment, disenrollment, HEDIS and CAHPS measures of the quality of care delivered, as well as data on the benefits offered by M+C MCOs and their financial performance. We examine the extent to which the number of M+C MCOs available to beneficiaries declined over the 1997-to-2001 period, how benefit generosity changed, how the quality of care delivered by M+C MCOs varies across markets, and other factors related to M+C MCO performance.

Of all Metropolitan Statistical Areas (MSAs) across the country where M+C MCOs are available, we chose to study those with a population of at least 1.5 million or a Medicare managed care penetration rate of 30 percent. Sixty-nine MSAs met the criteria, and together they accounted for 74 percent of all Medicare managed care enrollees in 1998 (and the same percentage of all M+C enrollees in that year).⁹ In addition to our market-level indicators (listed in Appendix A), we also took an in-depth look at 16 case study markets, with a special report on these markets, and an actuarial analysis of the value of M+C benefits offered in these markets over the 1999-to-2001 period (conducted by Actuarial Research Corporation).

⁹ Two of the markets among the 69 did not have any M+C enrollees in 1997 (Dubuque, Iowa and Grand Junction, Colorado. Those markets were picked because cost contracts gave them a Medicare managed care penetration rate of at least 30 percent.

FIGURE I.1

NATIONAL RISK/M+C ENROLLMENT:
DECEMBER 1985 – JUNE 2001



The focus on experiences in market areas is an important feature of this project. Despite growing concentration of managed care firms (Corrigan et al. 1997; PPRC 1997), market-specific factors play a major role in MCO entry and exit, as well as in the way in which managed care provider systems are structured and benefits are designed (Hurley et al. 1996). A market-based focus is especially important for tracking experiences under M+C, given the historic link between AAPCC rates and county-level per capita Medicare FFS expenditures. Though this link has been broken, the very nature of the change affects markets differently depending on their pre-M+C experience.

II. MCO PARTICIPATION AND ENROLLMENT

Following passage of the BBA 1997, MCO participation declined dramatically, with half of the number of MCOs serving the 69 study markets in 2001 compared with the program's peak in 1998. Exiting MCOs tended to have fewer enrollees than those remaining in the program, and, in 1999 and 2000, most beneficiaries affected by contract withdrawals chose to switch to another M+C MCO rather than return to FFS Medicare. Therefore the impact of reduced MCO participation on enrollment was not nearly as dramatic. Enrollment in Medicare managed care did decline for the first time in 2000, and overall M+C enrollment nationwide fell by almost 11 percent in 2001 from its 1999 peak.

Most Medicare beneficiaries have fewer M+C MCOs to choose from in 2001 than they did in 1998. Across the 67 markets with M+C enrollment in 1998, 62 of those markets had three or more participating MCOs.¹⁰ By 2001, this was true for only 42 of the study markets. Over that period, three of the study markets had lost all participating M+C MCOs, and six had just one participating M+C MCO by 2001. Eleven of the study markets saw the number of participating MCOs decline from five or more to just two by 2001. Four markets saw a net increase of one M+C contract over the period (Honolulu, Hawaii; Modesto, California; Pittsburgh, Pennsylvania; and State College, Pennsylvania).

Very few new types of organizations have entered the Medicare+Choice program. Only one private fee-for-service organization participates in the M+C program—Sterling Life Insurance.

¹⁰ Two of the markets among the 69 did not have any M+C enrollees in 1997 or 1998 (Dubuque, Iowa and Grand Junction, Colorado). Those markets were included among the 69 because cost contracts gave them a Medicare managed care penetration rate of at least 30 percent.

Nationally, by 2001, two preferred provider organizations and two provider-sponsored organizations were participating in the M+C program. The remaining M+C MCOs across the 69 markets were health maintenance organizations.¹¹

A. MCO PARTICIPATION DECLINED RESULTING IN FEWER CHOICES FOR BENEFICIARIES

About half the number of M+C contracts were operating across the 69 markets in March 2001 as were operating at the program's peak in 1998. Nationally, the number of M+C contracts fell from a high of 346 in 1998 to 179 in 2001 (Table II.1). Medicare beneficiaries across the 69 markets were left with fewer options. In 1997, 74 percent of beneficiaries in the study markets had five or more contracts to choose from; in 2001, only 32 percent had that much choice (Table II.2). Over the same period, the proportion of Medicare beneficiaries with no M+C contracts available across the 69 study markets grew from 1 percent to 4 percent, and the proportion with only one M+C contract available in their area grew from 4 percent to almost 9 percent.

In 1998, all but five of the 67 study markets with M+C enrollment had three or more participating MCOs. By 2001, only 41 of those markets still had three or more MCOs participating in the M+C program. Nine of the study markets saw a critical decline in the number of participating MCOs over the 1998 to 2001 period. Three markets lost all their participating M+C MCOs over this period (Norfolk, Virginia; Medford, Oregon; and Killeen, Texas). Six markets lost all but one of their participating MCOs by 2001 (Colorado Springs, Colorado; Houston, Texas; Pueblo, Colorado; San Luis Obispo, California; Spokane, Washington; and Williamsport, Pennsylvania). In addition, 11 markets saw a decline in the

¹¹ HMOs, PPOs and PSOs participating in the M+C program are referred to as coordinated care plans (or CCPs) by CMS.

TABLE II.1

TOTAL NUMBER OF MEDICARE+CHOICE CONTRACTS
IN THE 69 MARKETS AND IN THE NATION:
DECEMBER 1997 – MARCH 2001

	December 1997	June 1998	June 1999	March 2000	March 2001 ^a	Percent Change June 98– March 01
69 Markets	232	245	215	187	127	-48.2
National	307	346	303	263	179	-48.3

SOURCE: 69 Markets: Source file created from CMS's State/County/Plan files and Geographic Service Area files, various months. National: CMS's Medicare Managed Care Contract Monthly Summary Report, various months.

NOTES:

^a One contract, of type PFFS, was not included in the March 2001 count for the 69 markets.

TABLE II.2
 AVAILABILITY OF MEDICARE+CHOICE CONTRACTS
 DECEMBER 1997 – MARCH 2001

	December 1997	March 1999	March 2000	March 2001
Percent distribution of beneficiaries by number of M+C contracts offered in county of residence				
0	1.0	1.4	2.9	4.3
1	3.9	2.6	2.9	8.8
2-4	20.8	28.7	38.3	54.6
≥ 5	74.2	67.3	55.9	32.4
Number of markets in which:				
All beneficiaries live in a county in which at least on M+C contract is offered	57	58	54	51
All beneficiaries live in a county in which five or more M+C contracts are offered	28	20	16	10
Some beneficiaries live in a county in which only one M+C contract is offered	14	13	16	23
At least 90 percent of beneficiaries live in a county in which five or more M+C contracts were offered	36	30	23	11

SOURCE: Source file created from CMS's State/County/Plan files and Geographic Service Area files, various months.

number of participating MCOs from four or more to just two.¹² Clearly markets that lose all participating M+C MCOs or that are left with just one participating MCO raise the greatest concern. But also dropping from four or more participating MCOs to just two may bring a decline in the level of competition between M+C MCOs in the market.

With this decline in M+C MCO participation, it is not surprising that enrollment in Medicare managed care declined for the first time in 2000. Across the 69 markets, enrollment in the M+C program in 2001 was almost 11 percent below its 1999 peak (Table II.3). Because most beneficiaries affected by contract withdrawals switched to another M+C MCO, and because many of the withdrawing MCOs had relatively few enrollees, the overall impact on M+C enrollment was modest, relative to the drop in MCO participation.

B. CONTRACT NONRENEWALS AND SERVICE AREA REDUCTIONS

Nationally the number of enrollees affected by contract withdrawals and service area reductions grew from 409,295 in 1999 to 943,856 in 2001.¹³ In 1999, 7.2 percent of enrollees were affected by contract withdrawals, this grew to 15.1 percent in 2001 (Table II.4). The impact of contract withdrawals was widespread and few markets were left untouched. Across the 69 markets, 5 percent of M+C enrollees were affected by contract withdrawals in 1999, and 11 percent were affected in 2001. Only 7 of the 69 markets did not have any contract withdrawals in 1999, 2000 or 2001. In 20 of the 69 markets, more than 30 percent of

¹² Those markets were Baltimore, Maryland; Baton Rouge, Louisiana; Boulder, Colorado, Chicago, Illinois; Dallas, Texas; Fort Worth, Texas, Houma, Louisiana; Las Vegas, Nevada; San Antonio, Texas; Tucson, Arizona; and Washington, DC.

¹³ CMS has indicated that in 2002, approximately 536,000 enrollees will be affected by contract withdrawals.

TABLE II.3
MEDICARE+CHOICE ENROLLMENT AND PENETRATION
RATES IN THE 69 MARKETS AND THE NATION

	December 1997	December 1998	December 1999	March 2000	March 2001 ^a	Percent Change from December 1997 - March 2001
69 Markets						
Enrollment	4,109,936	4,714,106	4,612,748	4,678,590	4,350,186	5.8
Penetration Rates	24.7	28.0	27.2	27.6	25.3	2.4
Nation as a Whole						
Enrollment	5,211,339	6,055,546	6,347,434	6,221,143	5,671,169	8.8
Penetration Rates	13.4	15.5	16.1	15.8	14.0	4.5

SOURCES: National enrollment figures come from the Medicare Managed Care Contract Report for the given month. National penetration rates were calculated by using the total number of eligibles reported by county in the State/County Penetration files for the given month.

NOTES:

^a The 69 markets totals for March 2001 do not include enrollees in a new entrant to the M+C program, the Private Fee For Service (PFFS) plan run by Sterling Life Insurance

TABLE II.4

M+C/RISK CONTRACT NONRENEWALS AND SERVICE AREA REDUCTIONS, 1998–2001

	69 Markets	National
1998		
Number of Risk Contracts		
December 1997	232	307
Not Renewed	5	5
Number of Risk Enrollees Affected by Nonrenewals	12,850	17,914
Percent of Beneficiaries Affected by Nonrenewals	0.1%	0.0%
Percent of Risk Enrollees Affected by Nonrenewals	0.3%	0.3%
1999		
Number of Risk Contracts		
June 1998	248	346
Not Renewed	31	43
With Service Area Reductions	33	54
Number of Risk Enrollees Affected by Nonrenewals	133,741	221,827
Service Area Reductions	84,394	187,468
Nonrenewals and Service Area Reductions	218,135	409,295
Percent of Beneficiaries Affected by Nonrenewals & Service Area Reductions	1.3%	1.1%
Percent of Risk Enrollees Affected by Nonrenewals and Service Area Reductions	5.0%	7.2%
2000		
Number of M+C Contracts		
June 1999	213	303
Not Renewed	28	41
With Service Area Reductions	25	58
Number of M+C Enrollees Affected by Nonrenewals	86,602	168,628
Service Area Reductions	70,272	157,947
Nonrenewals and Service Area Reductions	156,874	326,575
Percent of Beneficiaries Affected by Nonrenewals & Service Area Reductions	0.9%	0.8%
Percent of M+C Enrollees Affected by Nonrenewals and Service Area Reductions	3.4%	5.3%
2001		
Number of M+C Contracts		
June 2000	187	261
Not Renewed	45	64
Service Area Reductions	29	54
Number of M+C Enrollees Affected by Nonrenewals	412,627	645,920
Service Area Reductions	111,880	297,936
Nonrenewals and Service Area Reductions	524,507	943,856
Percent of Beneficiaries Affected by Nonrenewals & Service Area Reductions	3.1%	2.3%
Percent of M+C Enrollees Affected by Nonrenewals and Service Area Reductions	11.1%	15.1%

NOTE: We did not calculate the number of contracts with service area reductions for 1998.

enrollees were affected by contract withdrawals in one of those three years. (Chapter 6 examines these markets in more detail). The number of enrollees affected by contract withdrawals within each of the 69 markets is presented in Appendix Table C-4.

The impact of withdrawals in 2001 was much more dramatic than in 1998 and 1999. In four markets in 1999 and 2000, 30 percent or more of enrollees were affected by contract withdrawals. However, in 2001, the number of markets where at least 30 percent of enrollees were affected grew to 16. In nine of these markets, at least 40 percent of enrollees lost access to their health plan: Baltimore, Maryland; Cincinnati, Ohio; Dallas, Texas; Houston, Texas; Medford, Oregon; Nassau, New York; New Haven, Connecticut; State College, Pennsylvania; and Williamsport, Pennsylvania. Conversely, in 1999 more than 40 percent of enrollees were affected by withdrawals in only one market.

Within the 69 markets, MCO pullouts appear to have occurred with somewhat greater frequency in high payment rate markets compared with low payment rate markets. For example, in 2001, 15 of the 16 markets with payment rates exceeding 15 percent of the USPCC experienced a contract withdrawal, whereas only 8 of the 25 markets with M+C payment rates below the USPCC experienced a contract withdrawal (Table II.5). In 1999, across the 69 markets, two-thirds of beneficiaries who were affected by contract nonrenewals and service area reductions resided in markets with relatively high M+C payment rates. A larger share of the markets in mid- to higher payment rate areas were affected by withdrawals in each of these three years than is the case for the lowest payment rate markets.

However, in interpreting the higher incidence of greater withdrawals from mid- to high payment rate markets, we should remember that more MCOs were available in higher payment rate markets. These withdrawals also account for a large share of enrollees, partly because most

TABLE II.5

TOTAL NUMBER AND PROPORTION OF M+C ENROLLEES AFFECTED BY M+C CONTRACT NONRENEWALS AND SERVICE
AREA REDUCTIONS ACROSS THE 69 MARKETS CLASSIFIED BY KEY CHARACTERISTICS, 1999-2001

	1999				2000				2001			
	Number of Markets	Number of Markets Affected by Contract Nonrenewals or Service Area Reductions	Total Number of M+C Enrollees Affected ^a	Percentage of M+C Enrollees Dropped within Affected Markets ^b	Number of Markets	Number of Markets Affected by Contract Nonrenewals or Service Area Reductions	Total Number of M+C Enrollees Affected ^c	Percentage of M+C Enrollees Dropped within Affected Markets ^b	Number of Markets	Number of Markets Affected by Contract Nonrenewals or Service Area Reductions	Total Number of M+C Enrollees Affected ^d	Percentage of M+C Enrollees Dropped within Affected Markets ^b
Total	69	42	218,135	6.6%	69	38	158,904	5.0%	69	42	524,507	14.5%
Ratio of Weighted M+C												
Payment Rate to the USPPC ^e												
Less than 1.00	21	7	34,447	18	22	11	33,860	8	25	8	52,648	23
1.00 to 1.15	15	10	37,371	7	22	11	77,700	10	28	19	257,486	18
Greater than 1.15	33	25	146,317	6	25	16	47,344	3	16	15	214,373	11
M+C Penetration Rate ^f												
Less than 10 percent	7	4	27,887	29	3	2	15,218	32	3	2	10,222	18
10 to 24 percent	17	12	116,871	11	21	13	74,754	9	18	12	267,608	26
25 to 40 percent	31	21	64,566	4	28	16	29,995	2	26	21	217,558	12
Greater than 40 percent	12	5	8,811	2	14	7	38,937	4	18	7	29,119	4

NOTES:

^aBased on M+C Enrollment as of June 1998^bProportion of M+C enrollees affected across markets where at least one MCO did not renew its contract or reduced its service area (e.g., proportion of M+C enrollees affected across all markets in region 1 with a Service Area Reduction or Nonrenewal)^cBased on M+C Enrollment as of June 1999^dBased on M+C Enrollment as of June 2000^eWe classified markets by 1999 payment rates for the analysis of 1999 nonrenewals, 2000 payment rates for the analysis of 2000 nonrenewals, and 2001 payment rates for the analysis of 2001 nonrenewals.^fWe classified markets by M+C penetration rates in June 1998 for 1999 nonrenewals, June 1999 for 2000 nonrenewals, and June 2000 for 2001 nonrenewals.

enrollees across the 69 markets are in mid- to high payment rate markets. While more than 20 of the 69 markets are in low payment rate areas (where the M+C payment rate is below the USPCC, the number falling in this category varies by year), those markets account for only about 15 percent of M+C enrollment across the 69 markets. The higher level of MCO withdrawals from mid- to high payment rate markets does not appear to be more than proportional to their share of M+C MCO participation and enrollment.

Within the 69 markets, nonrenewing contracts were smaller on average than renewing contracts across 1999 to 2001 (Table II.6). M+C enrollment in nonrenewing contracts was higher on average in 2001 than in nonrenewing contracts in 1999 or 2000. More contracts withdrew in 2001, and, on average, they were larger than in previous years. Nonrenewing contracts tended to have entered the M+C program more recently than renewing contracts. For example, 16 percent or fewer of nonrenewing contracts had entered Medicare managed care before 1994 in each of these years, whereas more than one-third of renewing contracts had entered the program before 1994. A larger share of nonrenewing contracts were for profit, as compared with renewing contracts, and this difference was statistically significant in 1999 and 2001.

Clearly M+C MCOs are exiting from high payment rate areas as well as low payment rate areas. In many of the high payment rate areas, the number of available contracts fell considerably over the 1999 to 2001 period. However, it could be that to some extent, part of this was a healthy process of weeding out smaller MCOs that were not competitive. In several markets the number of MCOs available declined substantially, but no more than 3 percent of beneficiaries were affected by contract withdrawals in any given year. It might be that MCOs in relatively higher payment rate areas were accustomed to higher annual increases in their

TABLE II.6

COMPARISON OF NONRENEWING M+C CONTRACTS, RENEWING M+C CONTRACTS WITH SERVICE AREA REDUCTIONS,
AND RENEWING M+C CONTRACTS THAT DID NOT REDUCE THEIR SERVICE AREA, 69 MARKETS, 1999-2001

	1999			2000			2001		
	Nonrenewing M+C Contracts	Renewing M+C Contracts with a Service Area Reduction	Renewing M+C Contracts without a Service Area Reduction	Nonrenewing M+C Contracts	Renewing M+C Contracts with a Service Area Reduction	Renewing M+C Contracts without a Service Area Reduction	Nonrenewing M+C Contracts	Renewing M+C Contracts with a Service Area Reduction	Renewing M+C Contracts without a Service Area Reduction
Number of Contracts	31	33	182	28	25	163	45	29	113
M+C Enrollment									
Average	4,314**	25,429	19,558	3,093**	21,533	25,712	9,378**	38,950	28,590
Percent Distribution									
No Enrollment	0% [†]	0%	4%	0% ^{††}	0%	3.7%	2% ^{††}	0%	3%
Less than 1,000	32	15	19	32	8	11	9	3	14
1,000 - 5,000	36	6	23	50	12	18	22	17	13
5,001 - 10,000	19	18	15	11	28	18	44	17	15
10,001 - 25,000	13	30	19	7	24	22	16	17	24
25,001 - 50,000	0	12	10	0	20	13	4.	17	19
Over 50,000	0	18	9	0	8	14	2	28	12
Year of Entry									
1998 or Later	3 [†]	6	13	43 ^{††}	0	14	16 [†]	7	12
1996/1997	39	24	30	25	28	28	39	14	27
1994/1995	42	21	24	25	16	23	30	18	19
Before 1994	16	49	33	7	56	35	16	61	42
Percent For-Profit	87*	85*	65	71	84	64	89**	72**	59
Affiliation									
National HMO									
Company	81 [†]	70	48	68	64	43	69 ^{††}	48	37
Blue Cross/Blue Shield	3	3	13	7	8	13	9	3	16
Other	16	27	39	25	28	44	22	48	47

Notes: **Mean differs with statistical significance from that for renewing contracts without a service area reduction at the .01 level, two-tailed test.

*Mean differs with statistical significance from that for renewing contracts without a service area reduction at the .05 level, two-tailed test.

NOTES: ††Percent distribution differs with statistical significance from that for renewing contracts without a service area reduction at the .01 level, Fisher's exact test.

†Percent distribution differs with statistical significance from that for renewing contracts without a service area reduction at the .05 level, Fisher's exact test.

Medicare managed care payment rates. And that is what significantly changed under the BBA 1997. Rather than exiting from low payment rate areas, per se, MCOs also tend to exit from market areas where their expected future stream of payments before the BBA 1997 greatly diverged from the actual payment rates that they received after BBA 1997. Perhaps this change in payment rates is likely to have hit newer entrants and less competitive MCOs the hardest.

C. GROWING PROPORTION OF ENROLLEES AFFECTED BY CONTRACT WITHDRAWALS RETURN TO FFS MEDICARE

1. Methodology

For those M+C enrollees who were affected by service area reductions and contract nonrenewals, we estimated the proportion that returned to Medicare FFS and the proportion that enrolled in another M+C MCO. For these calculations, we used the Group Health Plan (GHP) files. We also used data files from CMS that identify contracts that withdrew from the M+C program in each year, as well as counties that were dropped by M+C contracts through service area reductions. For these estimates, beneficiaries who were enrolled in a withdrawing M+C contract as of June of the year before the withdrawal occurred are defined as having been affected by the contract withdrawal. By using enrollment status as of June of the previous year, rather than a later month, we capture the change in enrollment status both for those who immediately reacted to the announcement of a withdrawal, as well as for those who waited.

To examine whether enrollees affected by contract withdrawals returned to FFS Medicare or switched to another M+C plan, we relied on their enrollment status as of March 1 in the year of the withdrawal to determine their final enrollment status. For M+C withdrawals in 2001, beneficiaries were affected if they were enrolled in a withdrawing M+C contract as of June 2000. And we determined where they ended up by examining their enrollment status as of March 1, 2001. Some enrollees affected by contract withdrawals might have switched to another M+C

contract or returned to FFS Medicare, even if the contract had not withdrawn from their market. This analysis examines the status of all M+C enrollees who were affected by contract withdrawals and does not attempt to determine what they would have done in the absence of those withdrawals.

Our analysis is at the market level, but M+C MCO availability is determined at the county level. In some cases, enrollees may have been affected by a contract withdrawal and lived in a county where no other M+C MCOs were available, although M+C MCOs were available in other counties in the market. Our estimates do not adjust for such cases where beneficiaries had no choice but to return to FFS Medicare. In cases where no other M+C options were available in the market, or all other M+C MCOs were closed to new enrollees, this is straightforward to detect since over 90 percent of enrollees returned to FFS Medicare in those markets. That was true for 3 markets in 2001, and we present an estimate that adjusts for those cases.

2. Half of Enrollees Affected Returned to FFS Medicare in 2001

The proportion of enrollees affected by contract withdrawals that returned to FFS Medicare increased from 1999 to 2001 from 21 percent to 52 percent (Table II.7). More enrollees returned to FFS Medicare in 2001 partly because an increasing number did not have another M+C MCO option. After excluding three markets where more than 90 percent of M+C enrollees returned to FFS Medicare (indicating other M+C options were not available), for the remaining markets, 47 percent of beneficiaries returned to FFS Medicare on average. This is similar to the proportion of voluntary disenrollees who returned to FFS Medicare in 2001 (discussed below). The increases in M+C premiums and decline in benefit generosity that occurred in many of the markets over this period may partly explain why a growing proportion of both voluntary disenrollees and those affected by contract withdrawals are returning to FFS Medicare.

TABLE II.7

PROPORTION OF ENROLLEES AFFECTED BY CONTRACT WITHDRAWALS
RETURNING TO FFS MEDICARE, ACROSS THE 69 MARKETS,
1999 – 2001

Market	1999		2000		2001	
	Number Affected ^a	Proportion Returning to FFS	Number Affected ^a	Proportion Returning to FFS	Number Affected ^a	Proportion Returning to FFS
All 69 Markets	226,328	21	160,794	34	528,739	52
Albuquerque, NM	0	0	0	0	2,084	39
Atlanta, GA	5,575	20	3,651	49	18,443	63
Bakersfield, CA	405	7	427	5	0	0
Baltimore, MD	16,365	29	2,401	63	45,032	95
Baton Rouge, LA	2,118	9	9,382	11	6,748	18
Boston, MA	12,269	16	0	0	5,861	29
Boulder, CO	351	18	1,684	36	0	0
Chicago, IL	14,838	26	618	30	11,967	80
Cincinnati, OH	0	0	0	0	22,860	50
Cleveland, OH	3,552	16	3,898	63	29,490	44
Colorado Springs CO	5,675	20	195	30	0	0
Dallas, TX	3,146	17	11,246	28	34,200	39
Daytona Beach, FL	429	38	541	24	0	0
Denver CO	5,563	17	10,279	16	701	25
Detroit MI	0	0	0	0	88	18
Dubuque IA	NA	NA	NA	NA	NA	NA
Eugene, OR	0	0	0	0	0	0
Fort Lauderdale, FL	0	0	1,509	6	3,830	16
Fort Worth, TX	957	16	5,071	18	17,418	33
Grand Junction, CO	NA	NA	NA	NA	NA	NA
Honolulu, HI	0	0	0	0	0	0
Houma, LA	128	52	224	23	2,240	25
Houston TX	7,958	20	695	18	79,843	73
Jacksonville, FL	5,125	13	0	0	12,471	79
Kansas City, MO	0	0	3,040	28	1,670	20
Killeen, TX	0	0	NA	NA	NA	NA
Las Vegas, NV	0	0	12,924	36	0	0
Los Angeles, CA	1,723	12	450	12	11,841	24
Medford, OR	12	8	1,358	16	4,080	32
Miami, FL	0	0	0	0	2,194	17
Minneapolis, MN	3,644	63	2,743	14	13,504	22
Modesto, CA	0	0	0	0	0	0
Nassau, NY	21,198	15	11,882	21	38,357	43
New Haven, CT	4,869	23	2,887	32	25,378	49
New York, NY	21,817	17	8,040	26	5,376	59
Newark, NJ	2,147	28	2,031	57	1,152	56
Norfolk, VA	0	0	13,506	100	NA	NA
Oakland, CA	2,479	11	0	0	3,069	17
Olympia, WA	95	21	0	0	315	51
Orange County, CA	702	8	101	12	2,636	22

Market	1999		2000		2001	
	Number Affected ^a	Proportion Returning to FFS	Number Affected ^a	Proportion Returning to FFS	Number Affected ^a	Proportion Returning to FFS
Philadelphia, PA	472	31	3,727	24	1,095	53
Phoenix, AZ	0	0	16,970 ^b	11	0	0
Pittsburgh, PA	0	0	0	0	2,830	7
Portland, OR	0	0	923	17	0	0
Pueblo, CO	0	0	1,994	37	0	0
Riverside, CA	847	6	798 ^c	20	4,391	15
Rochester, NY	0	0	0	0	0	0
Sacramento, CA	640	6	0	0	470	25
St. Louis, MO	656	15	0	0	6,435	19
Salem, OR	0	0	0	0	0	0
San Antonio, TX	4,294	9	126	10	3,333	18
San Diego, CA	807	10	1,915	14	0	0
San Francisco, CA	3,412	15	0	0	12,244	28
San Jose, CA	4,249	14	0	0	2,520	25
San Luis Obispo, CA	7,402 ^d	40	3,391	64	0	0
Santa Barbara, CA	92	14	0	0	0	0
Santa Rosa, CA	36	44	0	0	728	40
Seattle, WA	19,313	10	0	0	22,486	69
Spokane, WA	5,443	27	8,233	56	0	0
State College, PA	0	0	0	0	5,091	83
Stockton, CA	0	0	0	0	1,920	10
Tampa, FL	970	7	2,726	32	24,339	28
Tucson, AZ	0	0	4,439	16	16,346	19
Vallejo, CA	1,193	36	0	0	0	0
Ventura, CA	300	9	2,192	17	0	0
Washington DC	18,517	43	1,360	90	9,550	96
West Palm Beach FL	0	0	907	24	4,901	31
Williamsport, PA	0	0	146	32	6,695	96
Yolo, CA	0	0	0	0	0	0

NOTES:

^a This is the number of involuntary enrollees that either returned to FFS Medicare or enrolled in another M+C MCO. In each model a small share of “involuntary disenrollees” were still enrolled in the MCO contract that had withdrawn from the market according to the GHP files. Those observations are not included in this analysis.

^b The estimates for 2000 include all disenrollment from contract H0307 in one county from which the contract only partially withdrew in 1999. We have therefore included some disenrollees in this estimate for this market who may not have been involuntary disenrollees because they lived in the part of the county still served by the contract.

^c The estimates for 2000 include all disenrollment from contract H5005 in one county from which the contract only partially withdrew in 1999. We have therefore included some disenrollees in this estimate for this market who may not have been involuntary disenrollees because they lived in the part of the county still served by the contract.

^d The estimates for 1999 include all disenrollment from contract H0559 in one county from which the contract only partially withdrew in 1999. We have therefore included some disenrollees in this estimate for this market who may not have been involuntary disenrollees because they lived in the part of the county still served by the contract.

D. VOLUNTARY DISENROLLMENT RATES INCREASE SLIGHTLY

1. Methodology

In calculating these rates, we consider only those individuals who chose to leave their M+C organization and were not automatically disenrolled because their M+C MCO stopped serving their county.¹⁴ By conducting the analysis on beneficiaries who were enrolled in MCOs serving the selected markets on January 1 of each year and excluding those contracts that withdrew from the M+C program, we ensured that our disenrollment counts did not include forced disenrollments. We estimated the percentage of M+C enrollees that voluntarily disenrolled by April 1, 2001, from the M+C contract in which they were enrolled as of January 1, 2001. We did this for 1998, 1999, and 2000. We also estimate the proportion of voluntary disenrollees who returned to FFS Medicare and the proportion who were enrolled for three months or less. (For further description of the methodology, see Cook and McCoy 2001).

2. Voluntary Disenrollment Rates Increase and a Rising Share Return to FFS Medicare

Voluntary disenrollment rates during the first quarter of the year increased slightly over the 1998 to 2001 period to 4.1 percent from 2.5 percent (Table II.8). Variation across the 69 markets increased as well. In 1998, the voluntary disenrollment rate ranged from less than 1 percent to 6 percent across the 69 markets. However, in 2001 while the voluntary disenrollment rate remained low in some markets, that rate exceeded 8 percent in 5 of the 69 markets. Many MCOs increased their premiums and reduced benefits somewhat over this period (Cook 2001). The rise in voluntary disenrollment rates might have been a response to such changes.

¹⁴ We did not include deaths in our definition of disenrollment. Thus, beneficiaries whose disenrollment was due to death were included in the denominator but not in the numerator in our calculation of voluntary disenrollment rates.

TABLE II.8
QUARTERLYVOLUNTARY DISENROLLMENT RATES FOR MEDICARE
BENEFICIARIES IN M+C ORGANIZATIONS,
69 MARKETS, 1998 – 2001

Market	In Percent			
	1998	1999	2000	2001
All 69 Markets	2.5	2.7	4.2	4.1
Albuquerque, NM	1.6	2.9	2.3	7.0
Atlanta, GA	3.3	6.3	6.1	5.0
Bakersfield, CA	3.3	2.0	5.1	2.3
Baltimore, MD	3.5	3.4	5.8	5.3
Baton Rouge, LA	1.8	1.0	2.2	2.2
Boston, MA	1.2	1.5	3.1	2.7
Boulder, CO	1.8	2.2	7.0	1.0
Chicago, IL	2.7	3.2	4.6	5.3
Cincinnati, OH	2.1	3.7	6.4	1.6
Cleveland, OH	3.1	1.9	4.1	2.3
Colorado Springs, CO	2.5	6.0	2.8	10.3
Dallas, TX	5.0	3.7	7.6	8.1
Daytona Beach, FL	1.9	2.8	2.6	2.8
Denver, CO	1.9	2.1	3.6	2.8
Detroit, MI	2.7	1.5	1.7	1.9
Dubuque, IA	N/A	N/A	N/A	N/A
Eugene, OR	1.5	1.1	0.9	2.0
Ft. Lauderdale, FL	3.4	4.1	10.8	5.7
Fort Worth, TX	3.0	2.5	2.3	3.2
Grand Junction, CO	N/A	N/A	N/A	N/A
Honolulu, HI	0.4	0.5	0.9	1.1
Houma, LA	4.4	14.8	2.6	3.3
Houston, TX	3.7	3.7	3.6	3.7
Jacksonville, FL	4.4	5.6	13.5	5.2
Kansas City, MO	2.0	2.4	2.3	11.0
Killeen-Temple, TX	N/A	N/A	N/A	N/A
Las Vegas, NV	5.6	6.5	2.0	3.2
Los Angeles, CA	2.5	2.0	2.6	2.5
Medford, OR	7.5	1.5	3.2	N/A
Miami, FL	3.5	5.0	5.9	7.2
Minneapolis, MN	1.1	2.0	0.9	0.7
Modesto, CA	1.7	2.8	3.2	1.6
Nassau, NY	2.9	4.0	4.4	3.9
New Haven, CT	3.1	6.0	3.6	2.1
New York, NY	2.5	3.1	3.1	3.3
Newark, NJ	5.7	3.1	8.5	4.9
Norfolk, VA	1.1	0.9	N/A	N/A
Oakland, CA	1.4	0.9	1.9	1.6
Olympia, WA	0.6	1.2	1.4	3.0
Orange County, CA	3.1	1.9	2.8	8.4
Philadelphia, PA	1.4	1.1	3.4	4.7

Market	1998	1999	2000	2001
Phoenix, AZ	2.2	3.0	4.5	3.4
Pittsburgh, PA	1.0	1.2	1.6	1.5
Portland, OR	2.6	1.2	1.6	4.7
Pueblo, CO	6.0	6.9	2.1	3.4
Riverside, CA	3.5	3.1	5.0	5.6
Rochester, NY	0.4	0.4	0.3	2.0
Sacramento, CA	1.1	3.8	3.3	3.9
St. Louis, MO	1.1	1.2	2.6	6.1
Salem, OR	0.9	1.1	1.0	1.5
San Antonio, TX	3.0	3.4	4.4	3.3
San Diego, CA	1.1	1.3	2.7	4.5
San Francisco, CA	2.9	2.2	2.8	2.5
San Jose, CA	1.1	1.3	3.7	3.1
San Luis Obispo, CA	3.2	2.2	2.7	3.4
Santa Barbara, CA	1.6	4.9	3.7	4.3
Santa Rosa, CA	1.3	1.0	1.0	1.7
Seattle, WA	1.3	1.2	2.8	2.3
Spokane, WA	2.7	5.5	1.0	3.2
State College, PA	0.4	1.0	1.0	1.4
Stockton, CA	1.3	3.2	4.0	4.2
Tampa, FL	4.3	4.9	9.1	7.2
Tucson, AZ	2.6	2.8	4.6	3.0
Vallejo, CA	1.0	0.6	8.8	2.2
Ventura, CA	2.7	5.8	9.6	6.2
Washington, DC	5.5	2.5	4.2	6.8
West Palm Beach, FL	3.4	4.3	9.6	3.9
Williamsport, PA	0.4	1.4	0.7	2.6
Yolo, CA	0.4	0.5	1.0	1.7
Median	2.5	2.5	3.1	3.3
Minimum	0.4	0.4	0.3	0.7
Maximum	6.0	14.8	13.5	11.0

NOTE: Based on Medicare beneficiaries who disenrolled in the first three months of the year shown. The quarterly voluntary disenrollment rate is the percentage of M+C enrollees who chose to disenroll from their MCO during the first three months of the year. We do not include deaths, nor do we include enrollees affected by contract withdrawals in our count of voluntary disenrollees.

N/A = Market had no M+C enrollees in year shown.

While voluntary disenrollment rates increased only modestly over this period, the proportion returning to FFS Medicare rose considerably. The proportion of voluntary disenrollees returning to FFS Medicare increased from 30 percent in 1998 to 45 percent in 2001 (Table II.9). For 44 of the 69 case study markets in 2001, more than half of the voluntary disenrollees returned to FFS Medicare (Figure II.1).

E. SUMMARY

MCO participation in Medicare managed care declined substantially over the 1998 to 2001 period. As MCOs withdrew from the M+C program, the number of beneficiaries affected by withdrawals grew from 409,000 in 1999 to over 900,000 in 2001. Most beneficiaries affected by contract withdrawals were in mid- to high payment rate markets, and most of the withdrawing contracts were from these markets. However, the greater withdrawal activity in these markets does not appear to be more than proportional to their higher levels of M+C MCO participation and enrollment.

The proportion of disenrollees, both voluntary and those affected by contract withdrawals, who chose to return to FFS Medicare increased dramatically over the period. In 1998 and 1999, only about 30 percent of voluntary disenrollees returned to FFS Medicare. By 2001, this had risen to 45 percent. Similarly in 1999, only 21 percent of enrollees affected by contract withdrawals returned to FFS Medicare. By 2001, after excluding three markets with other M+C MCOs that were not available, 47 percent of enrollees affected by contract withdrawals returned to FFS Medicare. This rise in the proportion of disenrollees returning to FFS Medicare is disturbing. Perhaps this result is driven partly by the reduced availability of alternate M+C products as well as by a decline in the generosity of M+C benefits over the period, which we examine in the following chapter.

TABLE II.9

PERCENT OF VOLUNTARY DISENROLLEES RETURNING TO TRADITIONAL
MEDICARE, 69 MARKETS: 1998 – 2001

Market	1998	1999	2000	2001
All 69 Markets	30	28	31	45
Albuquerque, NM	27	19	24	79
Atlanta, GA	54	29	33	91
Bakersfield, CA	17	21	12	54
Baltimore, MD	42	38	58	96
Baton Rouge, LA	33	48	35	68
Boston, MA	41	34	43	67
Boulder, CO	26	29	65	60
Chicago, IL	50	38	49	59
Cincinnati, OH	42	32	47	78
Cleveland, OH	35	41	29	67
Colorado Springs, CO	26	23	88	95
Dallas, TX	36	37	32	78
Daytona Beach, FL	42	50	62	76
Denver, CO	24	19	28	46
Detroit, MI	58	54	51	56
Dubuque, IA	N/A	N/A	N/A	N/A
Eugene, OR	61	50	48	58
Ft. Lauderdale, FL	19	14	6	20
Fort Worth, TX	32	32	37	88
Grand Junction, CO	N/A	N/A	N/A	N/A
Honolulu, HI	94	86	63	48
Houma, LA	57	78	64	72
Houston, TX	38	30	27	98
Jacksonville, FL	23	18	24	91
Kansas City, MO	36	26	32	14
Killeen-Temple, TX	N/A	N/A	N/A	N/A
Las Vegas, NV	14	14	25	23
Los Angeles, CA	26	27	21	28
Medford, OR	25	41	70	N/A
Miami, FL	31	18	17	19
Minneapolis, MN	72	81	66	74
Modesto, CA	31	21	29	58
Nassau, NY	24	31	59	69
New Haven, CT	27	24	52	78
New York, NY	45	40	58	48
Newark, NJ	55	58	86	76
Norfolk, VA	100	96	N/A	N/A

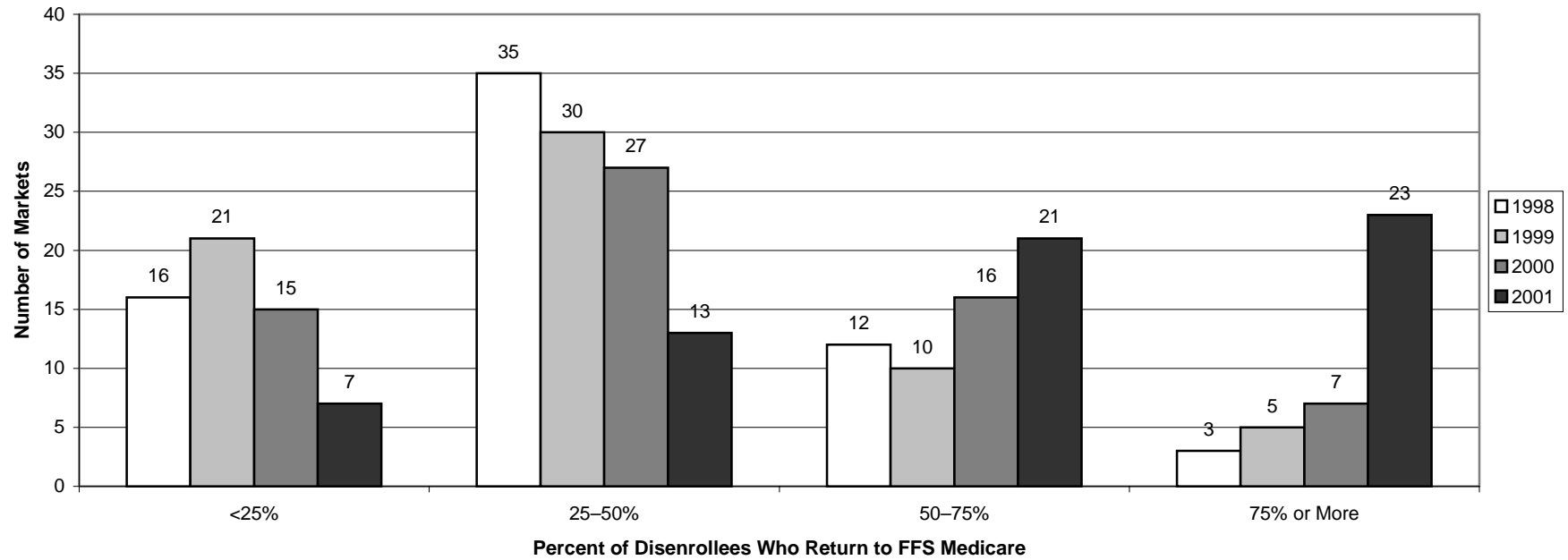
Market	1998	1999	2000	2001
Oakland, CA*	38	34	34	75
Olympia, WA	57	31	50	86
Orange County, CA	16	24	15	9
Philadelphia, PA	36	44	48	54
Phoenix-Mesa, AZ	22	17	15	26
Pittsburgh, PA	45	39	42	39
Portland, OR	33	50	57	81
Pueblo, CO	20	93	89	76
Riverside, CA	13	15	9	22
Rochester, NY	64	59	73	50
Sacramento, CA	31	11	17	49
St. Louis, MO	55	48	41	49
Salem, OR	53	48	51	71
San Antonio, TX	36	27	25	41
San Diego, CA	34	25	18	18
San Francisco, CA	23	31	47	59
San Jose, CA	35	36	33	64
San Luis Obispo, CA	18	69	86	97
Santa Barbara, CA	36	12	38	93
Santa Rosa, CA	34	27	40	38
Seattle, WA	40	36	31	89
Spokane, WA	30	35	98	94
State College, PA	85	16	42	91
Stockton, CA	27	19	29	74
Tampa, FL	21	20	25	38
Tucson, AZ	22	18	13	40
Vallejo, CA	36	46	7	49
Ventura, CA	26	12	16	53
Washington, DC	39	57	88	98
West Palm Beach, FL	23	17	16	54
Williamsport, PA	21	54	80	96
Yolo, CA	56	64	52	54
Median	35	32	40	62
Minimum	13	11	6	9
Maximum	100	96	98	98

NOTE: Based on Medicare beneficiaries who disenrolled in the first three months of the year shown.

N/A = Market had no M+C enrollees in year shown.

FIGURE II.1

DISTRIBUTION OF MARKETS BY PERCENT OF VOLUNTARY DISENROLLEES
WHO RETURN TO FFS MEDICARE: 1998–2001



III. TRENDS IN M+C BENEFITS AND PREMIUMS, 1999 TO 2001

Many M+C MCOs reduced the generosity of their benefits and increased monthly premiums over the 1999 to 2001 period across the 69 study markets. And despite the increase in payment rates in some counties up to a floor level, substantial cross-market variation in the generosity of benefits remains. We found that in 24 of the study markets, at least two M+C MCOs continued to offer drug coverage and other supplemental benefits at a monthly premium of zero to \$25 in 2001. In another 18 markets, two M+C MCOs offered drug coverage at a premium of \$30 to \$55 in their basic benefit packages.¹⁵ Together these markets accounted for 85 percent of M+C enrollees across the study markets (though some M+C enrollees in these markets had basic benefit packages less generous than this).¹⁶ In the remaining study markets, most M+C MCOs did not offer drug coverage in their basic benefit packages in 2001, and, when drug coverage was offered, the monthly premium was at least \$60.

We contracted with Actuarial Research Corporation (ARC) to provide estimates of the actuarial value of M+C plan benefits across 16 case study markets.¹⁷ The purpose of this analysis was to examine trends in the value of the benefits that M+C MCOs provide as well as

¹⁵ Or, alternatively, only one MCO was available in the market, and it offered drug coverage at a premium of \$25 or less.

¹⁶ Our analysis focuses on the benefits offered in the basic package of MCOs operating in the largest county (with the most Medicare beneficiaries) within each MSA. Beneficiaries living in other counties within the MSA may have had less generous benefits (or more generous benefits).

¹⁷ The 16 case study markets are Albuquerque, New Mexico; Baltimore, Maryland; Boston, Massachusetts; Cincinnati, Ohio; Cleveland, Ohio; Houston, Texas; Kansas City, Missouri; Los Angeles, California; Miami, Florida; Minneapolis, Minnesota; New Orleans, Louisiana; New York, New York; Phoenix, Arizona; Portland, Oregon; Seattle, Washington; and Tampa, Florida.

their implications for expected beneficiary out-of-pocket payments from 1999 to 2001. The 1999-to-2001 period is a particularly important time to examine trends in the value of M+C benefits, because most M+C MCOs received only a modest 2 to 3 percent increase in their payment rates in two of these three years. Previous research has shown that over this period many MCOs increased their premiums and offered less generous benefits (Gold 2001). This has occurred in part because the cost of providing health services has risen faster than the M+C payment rates in most counties with participating M+C MCOs. The actuarial analysis allows for a summary interpretation of the overall trends in the value of benefits, cost sharing, and premiums across 16 case study markets.

We also examined how M+C MCOs use drug caps, copayments and formularies to manage prescription drug costs. For this analysis, we looked at all M+C contracts available nationally that offer outpatient prescription drug coverage in 2001. We found that drug benefits are generally capped in the lowest premium packages that offer such coverage, and the majority of MCOs use formularies to manage their drug benefit. Many M+C MCOs do not cover off-formulary drugs, and a few cover only generic drugs.

A. GENEROSITY OF BENEFITS ACROSS THE 69 MARKETS

1. Methodology

We examined the basic benefit packages that M+C contracts offered in the 69 market areas. For each market area, our analysis focused only on the basic packages offered in the county with the largest number of Medicare beneficiaries.¹⁸ In total, the analysis covered 256 basic benefit

¹⁸ In 2000, that was the same as the counties with the largest number of M+C enrollees. The counties chosen to represent each market area in 2001 were the same as those chosen in 2000.

packages, serving the largest counties across the 69 market areas.¹⁹ For the years 1999 and 2000, our analysis is based on benefit data available in Medicare Compare. For 2001, our analysis is based on the Plan Benefit Package database, provided by CMS, which is used for updating Medicare Compare.

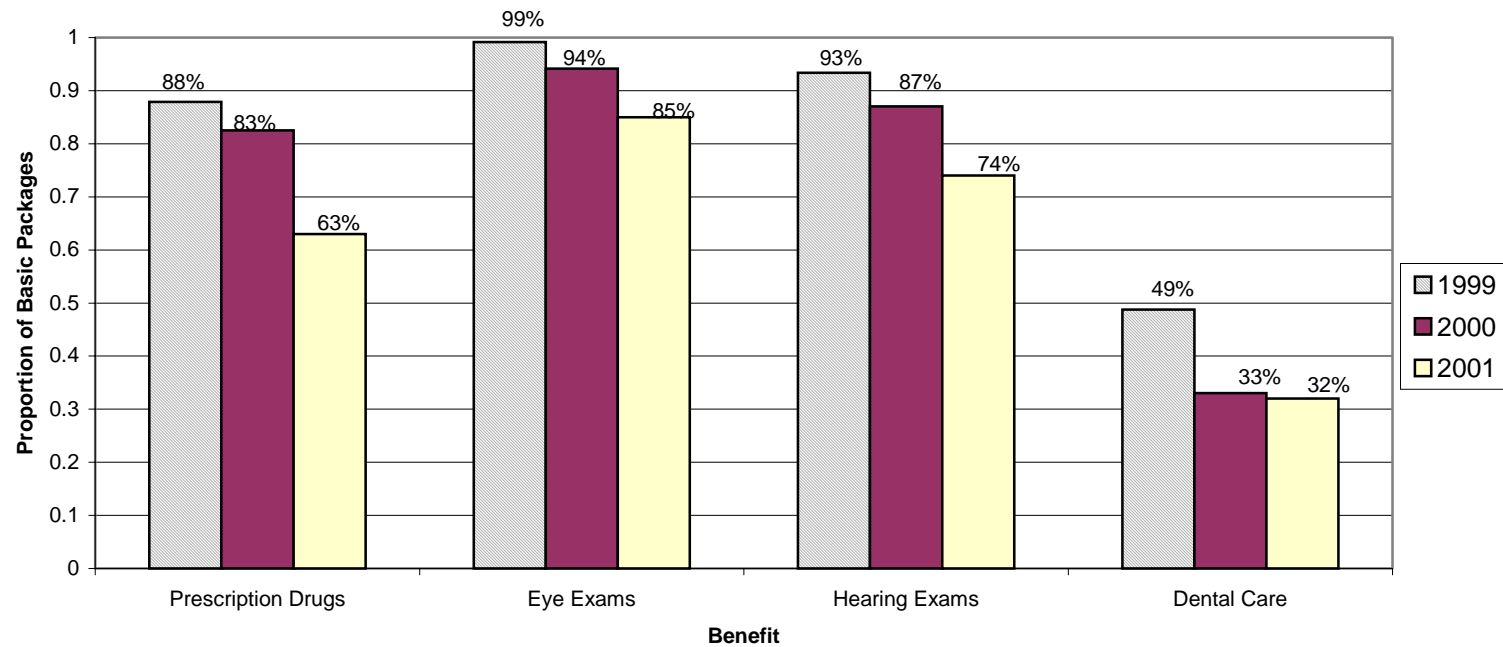
2. Benefits Declined over the 1999 to 2001 Period

Across the 69 markets, the proportion of basic packages offering prescription drug coverage declined from 88 percent in 1999 to 63 percent in 2001. Declines were also seen in the proportion of basic packages covering eye exams, hearing exams, and dental care (Figure III.1). In 1999, 81 percent of the basic packages charged no premium. By 2001, only 45 percent of the basic packages charged no premium, 24 percent had a premium of \$26 to \$50 per month, and 21 percent charged a premium of more than \$50 per month (Figure III.2). Still, across the 69 markets in 2001, 45 percent of basic packages offered prescription drug coverage at no premium. The average monthly premium for the 63 percent of basic packages offering drug coverage was \$24. Very few M+C plans offered an unlimited drug benefit. Only 16 of the 256 basic benefit packages across the 69 market areas offered an unlimited drug benefit. Prescription drug caps ranged from \$200 to \$12,000 in 2001. The average drug cap in 2001 was \$1,269 (Table III.1).

Benefit generosity is related to M+C payment rates. A much larger proportion of plans in high payment rate areas (where the M+C payment rate exceeds 15% of the USPCC) covered prescription drugs and other supplemental services compared with those basic packages offered

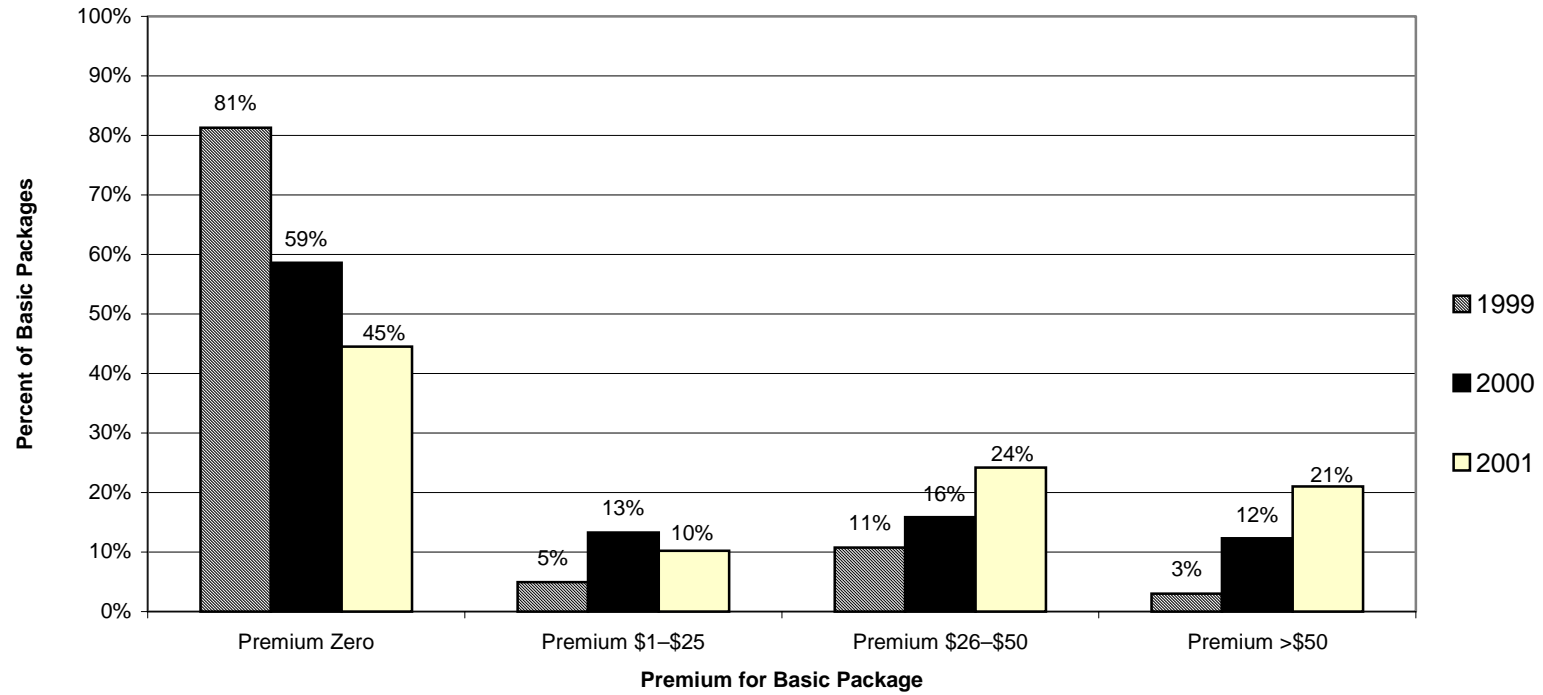
¹⁹Although only 179 contracts participated in the M+C program in 2001, the larger number of benefit packages reflects the fact that a single contract frequently served more than one of our 69 market areas.

Figure III.1
BENEFITS COVERED BY BASIC PACKAGES SERVING
THE 69 MARKET AREAS: 1999-2001



Source: CMS Benefit Package database for 2001 and Medicare Compare for 1999 and 2000
and Medicare Compare for 1999 and 2000

**FIGURE III.2
DISTRIBUTION OF PREMIUMS FOR BASIC PACKAGES
SERVING THE 69 MARKET AREAS**



Source: CMS Plan Benefit Package database for 2001 and Medicare Compare for 1999 and 2000

TABLE III.1

GENEROSITY OF M+C BASIC PACKAGES IN 2001, BY MARKET CHARACTERISTICS

	Proportion of Benefit Packages With:										
	Number of Basic Packages in 2001	No Premium	Drug Coverage and No Premium	Drug Coverage	Average Premium For All Packages	Average Premium with Drug Coverage	Highest Premium	Average Cap	Range on Cap		Number with No Cap
									Low	High	
Across the 69 Markets	256	44.5	21.9	63.0	\$26.19	\$24.29	\$114	\$1,269	\$200	\$12,000	16
2001 M+C Payment Rate Relative to USGCC											
< 1.00	54	7.4	1.9	31.5	49.69	51.88	99	1,023	500	1,750	4
1.00-1.15	112	40.2	25.0	67.0	25.87	22.63	70	1,184	300	3,000	5
> 1.15	90	72.2	62.2	81.1	12.48	9.77	99	1,523	200	12,000	7
M+C Payment Ratio < 1.00 and:											
Penetration Rate < 25%	23	13.0	4.3	26.1	\$56	\$63.5	\$99	\$750	\$500	\$1,000	2
Penetration Rate >= 25%	31	3.2	0.0	35.5	45	45.55	81	1,144	500	1,750	2
M+C Payment Ratio 1.00 to 1.15 and:											
Penetration Rate < 25%	36	55.6	25.0	50.0	21.42	20.31	79	803	300	2,500	0
Penetration Rate >= 25%	76	32.9	25.0	75.0	27.97	23.37	100	1,319	500	3,000	5
M+C Payment Ratio > 1.15 and:											
Penetration Rate < 25%	26	61.5	50.0	80.8	17.25	19.29	85	617	200	1,200	0
Penetration Rate >= 25%	64	76.6	67.2	81.3	10.55	5.92	114	1,999	400	1,2000	7

SOURCE: Tabulations from the Plan Benefit Package database for 2001 provided by CMS.

in the lowest payment rate markets. Throughout the 1999-to-2001 period, the majority of MCOs in markets where the M+C payment rate was lower than the USPCC did not offer prescription drug coverage in their basic package. At the same time, the majority of MCOs participating in markets where the payment rate exceeded the USPCC did offer such coverage in their basic package (Figure III.3).

3. Classifying Study Markets By Changes in Benefit Generosity From 1999 to 2001

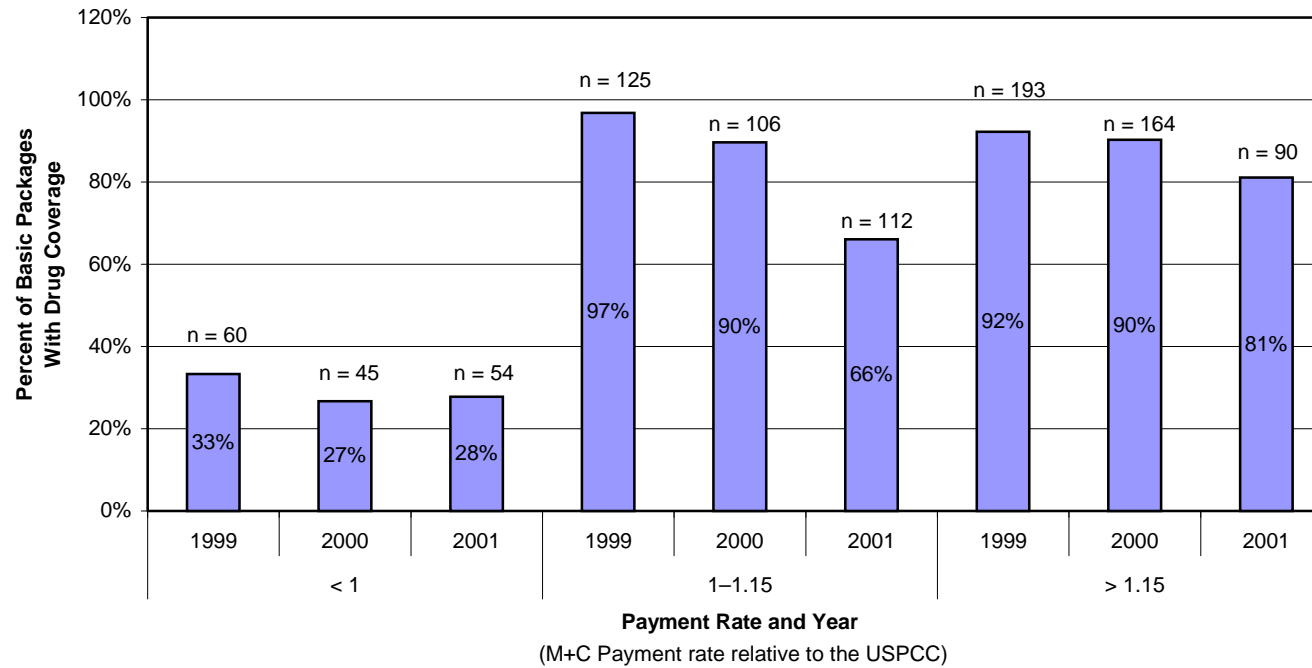
Despite the overall downward trend in benefit generosity, many M+C MCOs still offer beneficiaries supplemental coverage at a reasonable monthly premium, particularly when compared with individually purchased Medigap policies. In 2001, 24 of the 69 markets had two or more participating M+C MCOs that offer prescription drug benefits at a monthly premium of \$25 or less (Table III.2).²⁰ And an additional 18 markets had at least two M+C MCOs offering drug coverage in their basic package for a premium of \$35 to \$55 or one MCO offering drug coverage at a premium of \$25 or less. These markets, classified in Table III.2 as having M+C MCOs that offer fairly generous or a modest level of supplemental benefits in 2001 accounted for 81 percent of M+C enrollees across the study markets in 1999.²¹ While this analysis of benefits is restricted to the largest county within each market area, it appears that most M+C enrollees across the study markets retained access to at least a modest level of supplemental

²⁰ Note that this analysis focuses on the basic packages offered in the largest county within each of the 69 market areas. It therefore gives a general picture of the change in benefit generosity over the 1999 to 2001 period, but does not reflect what happened in the smaller counties within each of the MSAs.

²¹ Grouping markets by generosity of benefits is a challenging task because monthly premiums and the number of MCOs offering drug coverage are continuous variables. Within each group, variation in the generosity of benefits across markets exists. Nonetheless, these categories help summarize how the generosity of benefits changed at the market level between 1999 and 2001.

FIGURE III.3

**BASIC PACKAGES COVERING PRESCRIPTION DRUGS
BY PAYMENT RATE: 1999 - 2001**



Source: CMS Plan Benefit Package database for 2001 and Medicare Compare for 1999 and 2000

TABLE III.2

CLASSIFICATION OF STUDY MARKETS BY CHANGE IN GENEROSITY OF M+C
BENEFITS BETWEEN 1999 AND 2001

Classification of Markets by Benefit Generosity (a)	Criteria	Market Names		M+C Enrollment
Generous Benefits in 1999. Still fairly generous benefits in 2001	Drug benefits offered by most MCOs in the market at no monthly premium in 1999.	Bakersfield*	Las Vegas*	Total M+C Enrollment
		Baton Rouge*	Los Angeles*	
	Drug benefits offered by at least two MCOs in the market at a premium of \$25 or less in 2001.	Boulder*	Miami*	1999: 2,614,024
		Cincinnati*	New York	2001: 2,562,069
	24 markets	Cleveland*	Orange County*	Enrollment Share Across Study Markets:
		Dallas, TX	Philadelphia	
		Denver*	Phoenix*	1999: 56%
		Detroit	Riverside	2001: 59%
		Fort Lauderdale*	San Antonio*	
		Fort Worth*	San Diego*	
		Houma*	Tampa*	
		Kansas City	West Palm Beach*	
Benefits Generous in 1999, More modest in 2001	Most MCOs offered drug coverage at no premium in 1999. Most plans with rx coverage charge a premium of \$30 to \$55.	Atlanta*	Sacramento	Total M+C Enrollment
		Boston*	San Francisco	
	Or one plan with drug coverage available at a premium of \$25 or less	Daytona Beach	San Jose*	1999: 1,217,402
		Houston*	San Jose*	2001: 1,128,662
	18 markets	Jacksonville*	Santa Rosa	Enrollment Share Across Study Markets:
		Modesto	St. Louis*	
		Stockton	Vallejo	1999: 26%
		Nassau	Ventura	2001: 26%
		Oakland	Yolo*	
		Pittsburg		

Classification of Markets by Benefit Generosity (a)	Criteria	Market Names	M+C Enrollment
Substantial Decline in Benefit Generosity Between 1999 and 2001	Drug benefits offered by most MCOsin 1999 at no premium (with the exception of Pueblo). No drug coverage, or no plans available with drug coverage at a premium below \$60 in 2001. 11 markets	Albuquerque*	Total M+C Enrollment
		Baltimore*	1999: 475,579
		Chicago*	2001: 353,875
		San Luis Obispo*	Enrollment Share Across Study Markets:
		Tucson*	
		Washington DC*	1999: 10%
		New Haven	2001: 8%
		Newark	
		Rochester	
		Santa Barbara Pueblo	
Limited Supplemental Benefits over 1999 to 2001 Period ^a	Markets where most M+C MCOs did not offer drug benefits in 1999, or average monthly premiums were above \$50 in 1999. Benefits remained limited in 2001. 13 markets	Colorado Springs	Total M+C Enrollment
		Eugene, OR	1999: 354,619
		Honolulu, HI	2001: 300,255
		Medford, OR	Enrollment Share Across Study Markets:
		Minneapolis, MN	
		Norfolk, VA	1999: 7%
		Olympia, WA	2001: 6%
		Portland, OR	
		Salem, OR	
		Seattle	
		Spokane	
		State College	
		Williamsport	

Notes: *Indicates that in 1999 all M+C MCOs in the market offered a zero premium package with drug coverage.

(a)For two of the markets in this group, Medford and Norfolk, all M+C MCOs left by 2001.

Study Markets not included:

The study markets Dubuque, Iowa and Grand Junction, Colorado had no M+C plans available when 69 markets were selected. (These markets had cost and demonstration plans only). Kileen, Texas was not classified because it lost its only M+C contract (with no enrollment) in 1999. This market is still served by a cost contract.

benefits through the M+C program, though for most of these enrollees, benefits are not as generous in 2001 as they were in 1999. For all markets in these two groups, the majority of M+C MCOs offered prescription drug coverage in their basic package at a monthly premium of \$25 or less in 1999. In fact, all participating MCOs offered prescription drug benefits in their basic package with no monthly premium in 31 of the 69 study markets in 1999.²² This was true for only 4 of the 69 markets in 2001.

Eleven of the 69 markets saw a substantial decline in benefit generosity. These markets accounted for 10 percent of M+C enrollees across the study markets in 1999. Enrollment in these markets fell from 475,000 to just over 350,000 over the 1999-to-2001 period as some MCOs left the market, and the remaining MCOs offered much less generous benefits. For 10 of these 11 markets, most M+C MCOs offered prescription drug coverage at no premium, or a premium below \$20 in 1999.²³ By 2001, 7 of those 10 markets no longer had prescription drug coverage available through an M+C MCO, and, in the remaining markets, drug coverage was not available at a premium below \$60 per month.

Finally, in 13 of the study markets, supplemental benefits offered by M+C MCOs were extremely limited throughout the 1999-to-2001 period. Most MCOs in these markets did not offer drug benefits in 1999. In cases where drug benefits were available, average monthly premiums exceeded \$50 per month. Two of the markets in this group no longer had M+C MCOs

²² These markets are indicated with an asterisk in Table III.2. Note that this analysis is restricted to the basic packages offered in largest county (with the greatest number of Medicare beneficiaries) within each market area.

²³ Pueblo, Colorado had less generous benefits in 1999 than the other markets in this group. This market had three M+C MCOs in 1999, all of which offered prescription drug benefits in their basic package at a monthly premium of \$26 to \$50. By 2001, only one M+C MCO remained in the market. That MCO offered prescription drug coverage in its basic package, but the monthly premium was \$99.

participating in 2001 (Norfolk and Medford).²⁴ For the remaining markets in this group, benefits were no more generous or somewhat less generous than their limited 1999 levels.

While the changes brought about under the M+C program have contributed to the decline in the generosity of benefits over the 1999-to-2001 period, Medicare managed care remains a viable option for obtaining supplemental benefits to Medicare at a reasonable monthly premium in the majority of study markets. The 11 markets that did not have generous supplemental benefits to start accounted for 7 percent of M+C enrollees across the study markets in 1999. For these markets, the BBA 1997 does not appear to have increased the generosity of those benefits, although it might have helped prevent them from deteriorating further. At the same time, benefit generosity fell somewhat in all but four of the study markets, and, in 11 markets, generosity fell dramatically. We see that the BBA did not reduce the wide variation in benefit generosity across the study markets and the overall trend in benefit generosity was downward.

We examined how the increasing proportion of voluntary disenrollees returning to FFS Medicare was related to the decline in benefit generosity across the 69 markets by 2001. We find that markets where the decline in benefit generosity was more pronounced experienced a larger increase in the proportion of voluntary disenrollees returning to FFS Medicare. The 24 markets where benefits remained fairly generous in 2001 saw the smallest increase in the proportion of voluntary disenrollees returning to FFS Medicare, from 26 percent in 1998 to 33 percent in 2001 (Table III.3). By contrast, for those markets that saw a substantial decline in benefit generosity over the period, the proportion of voluntary disenrollees returning to FFS

²⁴ Medford was served by the private-fee-for-service plan Sterling in 2001. That plan offers no drug coverage, and its monthly premium was \$65.

TABLE III.3

PERCENT OF VOLUNTARY DISENROLLEES RETURNING TO FFS MEDICARE FOR MARKETS GROUPED BY CHANGE IN BENEFIT GENEROSITY

		Percent of Voluntary Disenrollees Returning to FFS Medicare							
		Weighted Market Average (b)				Unweighted Market Average			
Classification of Markets By Change in Benefit Generosity 1999 to 2001	Number of Markets(a)	1998	1999	2000	2001	1998	1999	2000	2001
Still fairly generous in 2001	24	26	25	25	33	30	30	31	45
Modest benefits by 2001	18	35	28	34	62	37	35	38	64
Substantial decline in benefit generosity	11	40	34	52	68	38	40	55	77
Limited benefits throughout the period	11	41	43	44	84	52	46	60	80

SOURCE: Calculated from the CMS Group Health Plan Files.

NOTES:

^(a)Five markets are not included. Three of the markets lost all M+C MCOs by 2001 (Killeen, Texas, Medford, Oregon, and Norfolk, Virginia). Two of the study markets are excluded here because they had cost contracts, but no M+C contracts (Dubuque, Iowa and Grand Junction, Colorado).

^(b)These estimates are weighted by the number of voluntary disenrollees in each market, and therefore reflect the proportion of all voluntary disenrollees in the market group that returned to FFS Medicare.

Medicare increased from 40 percent in 1998 to 68 percent in 2001. Those market which saw benefits decline to a more modest level in 2001 also experienced a large increase in the proportion of voluntary disenrollees returning to FFS Medicare, from 35 percent in 1998 to 62 percent in 2001. Finally, the 11 markets where benefits remained limited throughout the period also experienced a substantial increase in the proportion of voluntary disenrollees returning to FFS Medicare, from 41 percent in 1998 to 84 percent in 2001. For each of the four market groups, the proportion of voluntary disenrollees returning to FFS Medicare increased significantly in 2001.

B. ACTUARIAL ANALYSIS OF BENEFITS ACROSS 16 CASE STUDY MARKETS

1. Methodology

ARC analyzed trends in the value of benefits offered under the basic (lowest premium) packages in the largest counties within each of the 16 case study markets over the 1999-to-2001 period.²⁵ Its actuarial model generates the following estimates:

- *Net benefits* are the estimated dollar value of the coverage that the basic packages provide in the market area.²⁶ This is equal to the average monthly value of the health services covered, after excluding patient cost sharing (net of patient cost sharing). Two types of benefits are specified:
 - *Net traditional benefits* reflect the average dollar value that the basic packages provide for the types of health services used by an enrollee that are covered by Medicare Parts A and B (such as physician and hospital visits). This estimate

²⁵ The basic package is defined to be the lowest premium package an M+C contract offers in a county. (See Appendix B for more details on the methodology used).

²⁶ This is equivalent to the projected average cost for all beneficiaries enrolled in the M+C program.

includes any beneficiary cost sharing that traditional Medicare requires which the M+C MCO covers.²⁷

- *Net supplemental benefits* are the estimated dollar value of coverage an M+C MCO provides for health services not covered by traditional Medicare. These consist of prescription drugs, dental services, chiropractors, podiatrists, eye exams, glasses, hearing exams, and hearing aids.²⁸
- *Patient cost sharing* is the estimated average expenditures a Medicare beneficiary enrolled in the M+C plan incurs for health services used, given the benefit structure of the M+C plan. This includes copayments, coinsurance, and any services that exceed annual limits or are not covered by the plan (such as prescription drugs).

The market-level estimates are weighted by M+C enrollment in each MCO. The estimates have several caveats and limitations, one of which is that the depth of information available on benefits in Medicare Compare increased over this period. Because of that change, caution must be used in interpreting the exact dollar amount by which benefits changed over time. The estimates are intended to examine general trends in the value of benefits and patient cost sharing within and across the study markets. An overview of the methodology used to produce these estimates, along with a discussion of the limitations of the analysis, is provided in Appendix B. Highlights from the results of that actuarial analysis follow.

²⁷ For example, M+C MCOs frequently have lower copayments for physician visits than traditional Medicare. The value of net traditional benefits reflects the fact that M+C MCOs generally cover a larger share of the cost of those health services traditionally covered by Medicare because beneficiary cost sharing for these services is lower.

²⁸ Our use of the term supplemental benefits here differs somewhat from the standard CMS definition for the M+C program. This analysis does not include optional supplemental benefits that the enrollee must pay an additional amount, beyond the monthly premium, to obtain. It does include both additional benefits that cover the services described above (prescription drugs, dental services, etc.) and mandatory supplemental benefits.

2. Cost Sharing for Traditional Medicare Services

The monthly value of the traditional benefits provided by M+C MCOs across the 16 study markets ranged from a high of \$910 in Miami, Florida to a low of \$428 in Albuquerque, New Mexico in 2001 (Table III.4).²⁹ Beneficiaries might join M+C plans not only for the additional services covered (such as prescription drugs) but also because of the lower copayments for physician and other services traditionally covered by Medicare. The level of cost sharing borne by M+C enrollees is much lower than for those enrolled in fee-for-service (FFS) Medicare who have no supplemental coverage. In 1999, FFS beneficiaries without any supplemental coverage paid, on average, an estimated 12.4 percent of the cost of traditional services.³⁰ In 1999, M+C enrollee cost sharing for traditional health services varied from less than 1 percent in Miami and Los Angeles to 4.5 percent in Minneapolis. The monthly dollar amount varied from \$6 in Miami and Los Angeles to \$22 in New York. Monthly cost sharing for traditional services increased from an average of 2 percent in 1999 to 3.6 percent in 2001 across the 16 markets. Cost sharing for traditional services exceeded \$40 in four of the 16 case study markets by 2001. In 1999, the highest monthly value for patient cost sharing across all markets was just \$22.

Cost Sharing for Supplemental Services. The value of monthly net supplemental benefits varied from a high of \$152 in Miami, Florida to a low of \$17 in Seattle, Washington in 2001 (Table III.5). M+C enrollees pay for a substantial share of supplemental services in most of the

²⁹ This variation in the value of net traditional benefits across the study markets is quite large. Our previous report includes estimates of net traditional benefits, after adjusting for geographic differences in prices (Cook et al., August 2001). At adjusted prices, the value of net traditional benefits varies from a high of \$499 in Miami to a low of \$453 in Cincinnati in 2001.

³⁰ The beneficiary cost sharing estimates for those in FFS Medicare, expressed as a percentage of the total value of health services utilized that fall under services traditionally covered by Medicare, were provided by Actuarial Research Corporation using their Medicare Actuarial Rate Structure (MARS) model and appear at the bottom of Table III.3.

TABLE III.4

AVERAGE VALUE OF BENEFITS AND PATIENT COST SHARING FOR TRADITIONAL MEDICARE SERVICES

Market	Average Per Capita Value of Traditional Medicare Benefits			Average Value of Patient Cost Sharing for Traditional Services (in dollars)			Patient Cost Sharing Relative to Total Value of Traditional Services Used (in percent)			Change in Cost Sharing
	1999	2000	2001	1999	2000	2001	1999	2000	2001	2001-1999
All Areas ^(a)	572	613	641	12	14	24	2.0	2.3	3.6	1.6
Albuquerque	382	417	428	15	15	30	3.9	3.5	6.6	2.7
Baltimore	585	625	649	9	15	22	1.6	2.4	3.2	1.7
Boston	538	581	622	10	12	13	1.8	2.1	2.1	0.3
Cincinnati	473	503	500	12	21	56	2.5	4.0	10.0	7.5
Cleveland	540	573	588	12	22	43	2.2	3.7	6.8	4.5
Houston	596	641	681	12	13	12	1.9	1.9	1.8	-0.1
Kansas City	485	518	541	20	26	35	3.9	4.8	6.1	2.2
Los Angeles	632	679	717	6	10	13	0.9	1.5	1.8	0.9
Miami	785	864	910	6	2	7	0.8	0.2	0.7	-0.1
Minneapolis	405	438	462	19	19	22	4.5	4.1	4.5	0.0
New Orleans	623	670	688	10	11	32	1.5	1.6	4.4	2.9
New York	675	734	750	22	17	47	3.2	2.2	5.9	2.6
Phoenix	492	532	561	12	14	18	2.4	2.5	3.1	0.7
Portland	385	413	432	15	17	24	3.8	4.0	5.2	1.4
Seattle	431	465	490	9	10	13	2.0	2.1	2.6	0.6
Tampa, St. Petersburg	491	526	540	19	26	47	3.8	4.8	8.0	4.2
High	785	864	910	22	26	56	4.5	4.8	10.0	7.5
Low	382	413	428	6	2	7	0.8	0.2	0.7	-0.1
Average ^(b)	532	574	598	13	16	27	2.5	2.8	4.5	
Average Value										
For FFS Beneficiaries:							12.4	12.7	12.8	

SOURCE: Actuarial Research Corporation

^(a)This is an enrollment-weighted average across all market areas.^(b)This is an unweighted average of the estimates for each market.

TABLE III.5

AVERAGE VALUE OF BENEFITS AND PATIENT COST SHARING FOR SUPPLEMENTAL HEALTH SERVICES

Market	Average Per Capita Value of Supplemental Benefits (in dollars)			Average Value of Patient Cost Sharing for Supplemental Services (in dollars)			Patient Cost Sharing Relative to Total Value of Supplemental Services Used (in percent)			Change in Cost Sharing (in percent)
	1999	2000	2001	1999	2000	2001	1999	2000	2001	2001-1999
All Areas ^(a)	80	84	81	68	75	91	45.9	47.2	52.8	6.4
Albuquerque	28	21	29	104	123	128	78.6	85.4	81.7	3.1
Baltimore	74	69	79	73	90	92	49.5	56.4	53.6	4.1
Boston	63	63	59	79	91	108	55.7	59.3	64.5	8.9
Cincinnati	76	64	58	61	85	103	44.2	57.0	64.0	19.8
Cleveland	66	70	50	76	85	117	53.5	54.7	70.0	16.5
Houston	60	91	85	86	68	87	58.8	42.9	50.6	-8.1
Kansas City	61	68	35	77	83	129	55.8	55.2	78.9	23.1
Los Angeles	106	110	118	46	55	60	30.2	33.1	33.8	3.6
Miami	128	147	152	50	44	51	28.0	23.1	25.1	-2.8
Minneapolis	16	12	20	114	131	135	87.4	91.8	87.2	-0.2
New Orleans	72	79	81	78	86	93	52.2	52.1	53.6	1.3
New York	83	82	67	71	86	113	46.2	51.2	62.8	16.6
Phoenix	88	93	84	54	61	82	38.1	39.8	49.5	11.4
Portland	24	27	27	104	113	125	81.6	80.9	82.0	0.4
Seattle	19	32	17	114	112	140	86.0	77.7	89.3	3.4
Tampa, St. Petersburg	82	91	92	61	64	75	42.7	41.1	44.8	2.2
High	128	147	152	114	131	140	87.4	91.8	89.3	23.1
Low	16	12	17	46	44	51	28.0	23.1	25.1	-8.1
Average ^(b)	65	70	66	78	86	102	55.5	56.4	62.0	

SOURCE: Actuarial Research Corporation

^(a)This is an enrollment-weighted average across all market areas.^(b)This is an unweighted average of the estimates for each market.

case study markets. The estimates of net supplemental benefits and cost sharing are based on an average level of utilization of supplemental health services. The level of beneficiary cost sharing incorporates copayments and accounts for both benefit limits and services that the M+C MCO's basic package does not cover at all. For example, if the basic package does not offer prescription drug coverage, then 100 percent of the average monthly cost of outpatient prescription drugs is borne by the beneficiary in these estimates.

Overall, plans appear to have decreased the generosity of the supplemental benefits offered from 1999 through 2001, causing the average percentage of beneficiary cost sharing, across the 16 markets to rise from 46 percent to 53 percent over the 1999-to-2001 period. In dollar terms, cost sharing rose from an average of \$68 in 1999 to \$91 in 2001. Beneficiaries paid for at least 50 percent of supplemental services in 10 of the case study markets in 1999. By 2001, this was true for all but three of the case study markets.

Beneficiary Out-of-Pocket Expenses. As benefit generosity declined and health care costs grew, average beneficiary out-of-pocket expenditures increased. Across 16 case study markets, average monthly out-of-pocket expenditures, which are the sum of cost sharing for health services used plus the monthly M+C premium, grew from \$85 in 1999 to \$130 in 2001 across the 16 case study markets. Out-of-pocket expenditures include any monthly premium as well as cost sharing for health services, both traditional and supplemental. In 2001 beneficiary out-of-pocket expenditures exceeded \$150 per month for 10 of the 16 case study markets (Table III.6). From 1999 to 2001 beneficiary out-of-pocket expenditures increased by 50 percent or more in nine of the case study markets.

Those markets with the highest monthly premiums have the least generous supplemental benefits. In fact, comparing the average monthly premiums in Table III.6 with the average value

TABLE III.6

BENEFICIARY OUT-OF-POCKET EXPENDITURES, 1999 TO 2001

Market	Average Premium (in dollars)			Average Value of Patient Cost Sharing for Traditional Services (in dollars)			Average Value of Patient Cost Sharing for Supplemental Services (in dollars)			Total Value of Beneficiary Out-of-Pocket Expenditures (in dollars)			Percentage Change 1999 to 2001
	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001	
All													
Areas ^a	5.70	7.53	14.95	12	14	24	68	75	91	85	97	130	54.4
Albuquerque	0.00	0.00	0.00	15	15	30	104	123	128	119	138	158	32.3
Baltimore	0.00	31.43	79.00	9	15	22	73	90	92	82	137	193	134.9
Boston	8.50	3.80	35.39	10	12	13	79	91	108	97	108	156	61.1
Cincinnati	6.72	9.72	0.00	12	21	56	61	85	103	79	116	159	100.3
Cleveland	2.22	1.64	17.03	12	22	43	76	85	117	91	108	177	94.8
Houston	2.58	0.00	25.00	12	13	12	86	68	87	100	81	124	24.0
Kansas City	3.42	6.42	4.74	20	26	35	77	83	129	100	116	169	68.2
Los Angeles	0.00	0.00	6.94	6	10	13	46	55	60	52	65	80	55.5
Miami	0.00	0.00	0.00	6	2	7	50	44	51	56	46	58	3.6
Minneapolis	68.44	71.41	52.85	19	19	22	114	131	135	202	221	210	3.9
New Orleans	0.00	2.32	0.00	10	11	32	78	86	93	88	99	125	41.8
New York	0.48	1.02	0.92	22	17	47	71	86	113	94	103	161	70.6
Phoenix	5.90	0.00	0.00	12	14	18	54	61	82	72	75	100	39.7
Portland	30.67	47.43	52.88	15	17	24	104	113	125	150	178	201	34.1
Seattle	15.77	15.64	35.89	9	10	13	114	112	140	139	138	189	36.6
Tampa, St. Petersburg	0.00	14.52	13.40	19	26	47	61	64	75	80	104	135	68.4
High	68.44	71.41	79.00	22	26	56	114	131	140	202	221	210	134.9
Low	0.00	0.00	0.00	6	2	7	46	44	51	52	46	58	3.6
Average ^b	9.04	12.83	20.25	13	16	27	78	86	102	100	115	150	

SOURCE: Actuarial Research Corporation

^aThis is an enrollment-weighted average across all market areas.^bThis is an unweighted average of the estimates for each market.

of supplemental benefits in Table III.5, we see that in 2001, in three markets, monthly premiums exceeded the value of supplemental benefits: Minneapolis, Portland, and Seattle. Thus, many of the M+C enrollees paying the highest monthly premiums receive the least generous supplemental benefits. And the two most generous markets in terms of the supplemental benefits offered, Miami and Los Angeles, are among those with the lowest monthly premiums.

C. HOW M+C MCOS MANAGE PRESCRIPTION DRUG BENEFITS

1. Methodology

To analyze how MCOs manage their prescription drug benefits, including the use of formularies, drug caps, prior-approval processes, and other strategies, we took a comprehensive look at the entire Plan Benefit Package database. That database includes all 179 of the M+C contracts available in 2001 and each benefit package offered under each contract. Within that dataset, for each of the 135 contracts that offered prescription drug coverage, we chose the lowest premium package that covered prescription drugs.³¹ Fourteen of the 135 lowest premium packages covered only generic drugs, and the remaining 121 packages provided coverage for both brand-name and generic drugs.

³¹ Frequently several packages were offered under a contract that covered drug benefits, and all had the same low premium (such as a zero premium). In such cases, we chose the benefit package with the highest drug cap or with an unlimited benefit, if such a package was available. A number of packages covered only generic drugs. Such packages were chosen for this analysis only if they had a lower premium than all other packages offered under the contract that included drug coverage. In effect, we took the lowest premium package that offered drug coverage under the contract, and when several benefit packages met that criteria, we chose the one with the most generous drug benefit.

2. Overview of Drug Benefit Management in M+C MCOs

Formularies. A formulary is a list of drugs that the MCO encourages doctors to prescribe. Using a formulary can help steer utilization toward more cost-effective drugs and can enable the MCO to negotiate rebates from drug manufacturers. Of the MCOs using a formulary (88 percent), 34 percent reported that they did not cover drugs that are not on the formulary (Table III.7). It is not clear whether some of these MCOs provided for medical exceptions to obtain an off-formulary drug, which is typical of health plans in the commercial sector. Yet, having some M+C MCOs cover prescription drugs only on the formulary, without a medical exceptions process, would not be inconsistent with other limitations already placed on such coverage. For example, many M+C benefit packages did not cover prescription drugs at all. A few only covered generic drugs. And when drug benefits were offered, they were usually capped. These are all dimensions in which M+C MCO coverage differs from that generally available to those under age 65 with employer-based coverage.

Many M+C MCOs that cover off-formulary drugs do not require prior approval from a medical director or utilization review manager before such drugs are covered. Only 31 percent of the benefit packages with a formulary that also provides coverage for off-formulary drugs require prior approval from a utilization review manager or medical director (20 out of 65 benefit packages).

Prescription Drug Caps. All but four of the benefit packages examined had a cap on drug benefits. Almost one-third of the benefit packages offering drug coverage had an annual cap of

TABLE III.7
USE OF FORMULARIES BY M+C MCOs

Type of Coverage:	Number of Packages	Proportion of Packages
Formulary drugs only	41	33.9
Formulary drugs, coverage for off-formulary drugs	65	53.7
All Drugs Covered (no formulary)	15	12.4
Total Number of Basic Packages: with coverage for brand-name drugs	121	100.0

SOURCE: Tabulations from the Plan Benefit Package database provided by CMS.

NOTE: This analysis includes only those benefit packages that cover both brand-name and generic drugs. Out of 135 benefit packages with drug coverage, 14 covered only generic drugs.

\$500 or less (Table III.8).³² More than half (55 percent) of these packages had a cap of \$800 or less a year, while nineteen percent had a cap of \$1,500 or more. Only four benefit packages offered an unlimited drug benefit in their lowest premium package. For 12 benefit packages, the cap only applies to nonformulary drugs. Those 12 packages offer unlimited coverage for both brand-name and generic drugs on the formulary. For 20 benefit packages, the cap applied only to brand-name drugs. The coverage for generic drugs was unlimited.³³

³²We calculated the caps on an annual basis. For example, if the cap was a quarterly amount, we multiplied by four to convert it to an annual equivalent. Fifty-two percent of the basic benefit packages with brand-name drug coverage had annual caps, and 38 percent had quarterly caps.

³³ One package had unlimited coverage for generic and preferred brand-name drugs on the formulary.

TABLE III.8
DISTRIBUTION OF DRUG CAPS ACROSS LOWEST PREMIUM
M+C MCO BENEFIT PACKAGES WITH DRUG COVERAGE

Size of Drug Cap	Number of Packages	Proportion of Packages
\$200-\$400	13	11.7
\$500	23	20.7
\$600-\$800	25	22.5
\$1,000-\$1,400	25	22.5
\$1,500-\$1,800	9	8.1
\$2,000-\$2,500	8	7.2
\$3,000	2	1.8
\$4,000	1	0.9
\$12,000	1	0.9
Unlimited	4	3.6
Total	111	100.0

SOURCE: Tabulations from the Plan Benefit Package database provided by CMS.

NOTE: Based on the lowest premium package for each M+C contract offering prescription drug coverage. Eighteen benefit packages limited their drug benefit, but did not report the size of the cap. An additional 14 packages covered only generic drugs and are not included in the table above.

Copayments. Forty-one percent of the benefit packages covering brand-name drugs had copayments per prescription that ranged from \$20 to \$27 for brand-name drugs (Table III.9). Another 35 percent those benefit packages had copayments between \$10 and \$15 for brand-name drugs. Ninety-one percent of MCOs covering prescription drugs reported copayments of \$10 or less for generic drugs.

TABLE III.9
COPAYMENTS FOR PRESCRIPTION DRUGS IN LOWEST
PREMIUM M+C MCO BENEFIT PACKAGES
OFFERING DRUG COVERAGE

Brand-name Drugs		Generic Drugs	
Brand Copayment Amount	Proportion of Packages	Generics Copayment Amount	Proportion of Packages
\$0	3.1	\$0	6.7
\$1 to \$7	1.0	\$4 to \$5	20.0
\$10 to \$15	35.4	\$7 to \$10	64.2
\$20 to \$27	40.6	\$11 to \$15	8.3
\$30 to \$35	13.5	\$21	0.8
\$40 to \$50	5.2		
\$60	1.0		
Number Reporting	96	Number Reporting	120

SOURCE: Tabulations from the Plan Benefit Package database provided by CMS.

Across all MCOs, copayments are designed to favor generic over brand-name drugs, when generics are available. However, most MCOs do not use a three-tiered copayment system, designed to favor less expensive brand-name drugs over more expensive but therapeutically similar brand-name competitors. Of the 65 benefit packages that had a formulary and also provided coverage for off-formulary drugs, only 28 required a higher copayment for non-formulary brand-name drugs than for brand-name drugs on the formulary. And only 6 of the 106 benefit packages with a formulary had a class of drugs known as “preferred brand” which required a lower copayment than other brand-name drugs on the formulary. This suggests that many M+C MCOs are not fully utilizing the tools available to contain drug costs and provide

financial incentives for beneficiaries to follow the formulary. This might be because of difficulties in an elderly population navigating such a system. Or it might be because most M+C MCOs cap their drug benefit, so they do not find it worthwhile to invest more resources in managing drug benefits.

IV. FINANCIAL EXPERIENCE OF M+C MCOS

The profitability of M+C MCOs did not change significantly between 1998 and 1999, based on self-reported financial data. (Financial data for 2000 has only recently become available and was not analyzed for this project). Profit margins were slightly negative across many of the study markets in 1998 and 1999. The results of our actuarial analysis of plan benefits over the 1999-to-2001 period indicates that M+C MCO revenues (the sum of monthly payment rates plus any premium) rose more slowly across 10 of the 16 case study markets than the estimated value of the benefits did. Together, these results suggest that many M+C MCOs experienced a cost squeeze as M+C payment rates rose more slowly than the cost of providing health benefits.

A. RESULTS FROM ANALYSIS OF SELF-REPORTED FINANCIAL DATA

1. Methodology

M+C MCOs that wish to continue participating in the program are required to submit an Adjusted Community Rate (ACR) proposal to CMS. The ACR proposal contains financial data for the previous year. We analyzed the financial performance of M+C MCOs in 1998 and 1999 based on the data available to CMS from these ACR proposals.³⁴ The financial indicators we developed from these forms include:

- Operating Profit Margin—ratio of operating profit to operating revenue
- Overall Profit Margin—ratio of total profit to total revenue
- Overall Expense Ratio—ratio of direct medical cost plus administrative cost to operating revenue
- Current Ratio—ratio of current assets to current liabilities

³⁴ ACR proposals for 2000, submitted in 1999, contain financial data for 1998. Those submitted in 2001 contain financial data for 1999.

- Current assets and long-term bonds divided by current liabilities—ratio of the sum of current assets and long-term bonds to current liabilities

Financial data reported on the ACR proposals have two important shortcomings when used for monitoring purposes. First, all data apply to both Medicare and non-Medicare enrollees in the plans covered by the contract. Therefore, it is impossible to assess whether changes in profitability, net worth, liquidity, or other measures of financial health are the result of changes in Medicare payment rules or the result of other changes unrelated to Medicare policy. Second, only MCOs that seek to continue their participation in the Medicare+Choice program file ACR proposals. An MCO wanting to participate in the program in 2000 filed an ACR proposal in 1999 and reported financial information for 1998. Financial data for 1998 are not available for MCOs that withdrew in 2000. Similarly, financial data for 1999 are not available for MCOs that withdrew in 2001.

2. Little Change in M+C MCO Profitability From 1998 to 1999

M+C MCOs were available in 64 of the 69 market areas in 1998. Across most of the study markets, 1998's mean operating profit rate and overall profit rate of MCOs operating under Medicare+Choice contracts were negative (Table IV.1). Mean operating profit was positive in that year for only 26 markets; mean overall profit was positive in 22 markets.³⁵ Overall, the average operating and overall profit margin of Medicare+Choice contracts operating in the 69 markets areas rose slightly from 1998 to 1999 (Schmitz and Kornfield, 2001). The change was not dramatic. In 1999, mean operating profit remained negative in half of the market areas that

³⁵Because the data are not market-specific, it would be more precise to say that in 26 markets, the weighted mean of operating profit among all MCOs that compete in those markets was positive.

TABLE IV.1
INDICATORS OF MCO PROFITABILITY, 1998 AND 1999,
BY MARKET AREA

(Weighted by market share in contract total)

	No. of Plans		Operating Profit Margin		Overall Profit Margin		Overall Expense Ratio	
	1998	1999	1998	1999	1998	1999	1998	1999
Albuquerque, NM	3	2	0.04	-0.04	0.00	-0.03	1.01	-0.16
Atlanta, GA	5	2	-0.02	0.02	0.00	0.01	1.02	0.98
Bakersfield, CA	5	6	-0.01	0.01	0.00	0.02	1.01	0.99
Baltimore, MD	3	1	-0.01	-0.01	0.00	-0.01	1.01	1.16
Baton Rouge, LA	3	2	0.05	-0.02	-0.03	-0.02	1.03	1.02
Boston, MA	5	4	-0.25	-0.03	-0.01	-0.03	1.03	1.02
Boulder, CO	4	3	-0.0	-0.09	-0.03	-0.07	1.07	1.09
Chicago, IL	3	2	-0.02	-0.04	0.00	-0.01	1.02	1.04
Cincinnati, OH	7	4	0.03	0.09	0.04	0.00	0.98	1.02
Cleveland, OH	9	7	-0.01	0.00	-0.01	0.00	1.03	1.00
Colorado Springs CO	2	1	-0.06	-0.05	-0.03	-0.03	1.05	1.05
Dallas, TX	5	2	0.03	-0.02	-0.03	-0.01	1.04	1.02
Daytona Beach, FL	4	2	0.02	0.00	0.00	0.01	1.01	1.00
Denver CO	4	3	-0.06	-0.09	-0.03	-0.07	1.06	1.09
Detroit MI	7	6	-0.01	0.00	-0.01	0.00	1.02	1.00
Dubuque IA	-	-	-	-	-	-	-	-
Eugene, OR	2	-	-0.01	-	0.01	-	1.01	-
Fort Lauderdale, FL	9	9	0.01	-0.02	0.00	-0.01	1.01	1.02
Fort Worth, TX		2	-0.07	-0.07	-0.10	-0.04	1.11	1.07
Grand Junction, CO	-	-	-	-	-	-	-	-
Honolulu, HI	1	2	0.01	0.00	0.03	0.01	0.99	1.00
Houma, LA	3	3	-0.07	-0.19	0.04	-0.14	1.07	1.19
Houston TX	6	3	-0.02	-0.07	-0.01	-0.05	1.03	1.07
Jacksonville, FL	5	2	-0.04	-0.01	-0.02	0.01	1.02	1.01
Kansas City, MO	3	4	-0.01	0.01	0.01	0.00	1.01	1.00
Killeen, TX	-	-	-	-	-	-	-	-
Las Vegas, NV	3	2	-0.18	0.03	-0.17	0.03	1.18	0.97
Los Angeles, CA	9	8	0.01	0.00	0.01	0.01	0.99	0.99
Medford, OR	-	-	-	-	-	-	-	-
Miami, FL	9	9	0.01	-0.01	0.00	0.00	1.01	1.01
Minneapolis, MN	2	2	-0.01	-0.01	0.00	0.01	1.02	1.01
Modesto, CA	4	3	-0.04	-0.01	-0.02	-0.01	1.04	1.02
Nassau, NY	9	6	0.01	0.00	-0.04	0.01	1.05	1.00
New Haven, CT	7	4	-0.03	0.02	-0.01	0.05	1.04	0.99
New York, NY	9	8	-0.05	0.00	-0.04	0.02	1.05	1.00
Newark, NJ	5	5	-0.04	-0.01	-0.03	0.02	1.04	1.02

	No. of Plans		Operating Profit Margin		Overall Profit Margin		Overall Expense Ratio	
	1998	1999	1998	1999	1998	1999	1998	1999
Norfolk, VA	-	-	-	-	-	-	-	-
Oakland, CA	6	3	0.02	0.02	0.02	0.01	0.98	0.98
Olympia, WA	4	3	-0.02	-0.09	-0.01	0.00	1.03	1.09
Orange County, CA	9	8	0.02	0.02	0.02	0.01	0.98	0.98
Philadelphia, PA	7	8	0.01	-0.02	0.00	-0.01	0.99	1.03
Phoenix, AZ	7	6	0.04	0.02	0.03	0.03	0.96	0.98
Pittsburgh, PA	3	2	-0.01	0.01	0.00	0.01	1.01	1.01
Portland, OR	6	6	-0.03	-0.02	0.00	0.00	1.01	1.01
Pueblo, CO	2	2	-0.06	-0.13	-0.03	-0.10	1.06	1.13
Riverside, CA	8	7	0.01	-0.01	0.01	0.01	0.99	0.99
Rochester, NY	3	3	-0.04	0.06	-0.04	0.01	1.04	0.94
Sacramento, CA	6	2	0.04	0.02	0.03	0.02	0.96	0.98
St. Louis, MO	4	2	-0.05	-0.02	-0.02	-0.01	1.05	1.03
Salem, OR	4	2	0.01	0.00	0.02	0.01	0.99	1.00
San Antonio, TX	4	2	-0.03	-0.03	-0.01	-0.01	1.03	0.97
San Diego, CA	5	4	0.03	0.04	0.03	0.03	0.97	0.96
San Francisco, CA	7	3	0.01	0.01	0.02	0.01	0.99	0.99
San Jose, CA	5	2	0.04	0.02	0.03	0.01	0.96	0.98
San Luis Obispo, CA	2	1	0.06	0.07	0.04	0.05	0.94	0.93
Santa Barbara, CA	2	1	0.06	0.07	0.04	0.05	0.94	0.93
Santa Rosa, CA	5	3	-0.02	-0.02	-0.01	-0.02	1.02	1.02
Seattle, WA	6	3	0.01	-0.09	0.01	0.00	1.00	1.09
Spokane, WA	2	2	-0.01	0.01	0.00	0.02	1.02	0.99
State College, PA	3	2	0.00	-0.01	0.00	-0.01	1.00	1.01
Stockton, CA	4	3	-0.01	0.00	0.00	0.00	1.01	1.00
Tampa, FL	7	3	-0.02	-0.01	0.00	0.00	1.01	1.01
Tucson, AZ	5	4	-0.01	0.01	-0.01	0.01	1.01	0.99
Vallejo, CA	3	1	0.02	0.00	0.01	0.01	0.98	1.00
Ventura, CA	6	5	0.04	0.04	0.03	0.03	0.96	0.96
Washington DC	3	1	-0.01	-0.01	-0.01	-0.02	1.01	1.01
West Palm Beach FL	9	9	-0.01	-0.03	-0.01	-0.02	1.02	1.03
Williamsport, PA	3	1	-0.10	-0.01	-0.06	-0.01	1.10	1.01
Yolo, CA	2	2	0.01	0.03	0.02	0.02	0.99	0.96

operated with M+C contracts. We did not find that profits tended to be higher in higher payment rate markets.

While MCOs participating in the M+C program may have been slightly more profitable in 1999 than in 1998, their liquidity, on average, was about the same in 1999 as in 1998. However, substantial decreases in liquidity were more common than substantial increases. Table IV.2 displays weighted means, by market, for two measures of plan liquidity: the current ratio (current assets divided by current liabilities) and the ratio of current assets and long-term bonds to current liabilities. Although the weighted means across all contracts were about the same for the two years, the means by market for both measures were more likely to decline than to increase from 1998 to 1999. In 63 markets for which means were available in both 1998 and 1999, the mean of the ratio of cash plus long-term bonds to current liabilities decreased in 37 cases, increased in 24 cases, and remained unchanged in two cases. If we restrict attention to instances in which the change in the ratio was substantial, the difference is even greater. Of the 24 markets in which the mean of the ratio changed by more than 0.2, 16 showed a decline in the ratio and 8 showed an increase. Results for the current ratio are similar.

Financial data for 1998 include only those M+C MCOs that participated in 2000. And financial data for 1999 include only those M+C MCOs that participated in 2001. Therefore part of the change in profitability from 1998 to 1999 could be that M+C MCOs that withdrew in 2001 (for which no 1999 data are available) were somewhat less profitable than those that remained in the market. However, we find that restricting the analysis to contracts that remained in the markets in both years produces broadly similar results (Schmitz and Kornfield 2001).

B. ESTIMATED VALUE OF NET BENEFITS RISES FASTER THAN REVENUES

The average value of the benefits provided by M+C MCOs in their basic packages increased by almost 11 percent across the case study markets over the 1999-to-2001 period (Table IV.3).

TABLE IV.2

INDICATORS OF MCO LIQUIDITY BY MARKET, 1998 AND 1999

(Weighted by market share in contract total)

	No. of plans		Current ratio		Cash + LT bonds divided by current liabilities	
	1998	1999	1998	1999	1998	1999
Albuquerque, NM	3	2	0.96	0.92	1.19	0.93
Atlanta, GA	5	2	0.66	0.69	1.02	1.06
Bakersfield, CA	5	6	1.72	0.78	1.74	0.81
Baltimore, MD	3	1	0.90	1.16	1.35	1.17
Baton Rouge, LA	3	2	0.89	0.33	1.13	0.96
Boston, MA	5	4	0.83	0.65	1.29	1.11
Boulder, CO	4	3	1.23	0.77	1.42	0.81
Chicago, IL	3	2	0.91	0.74	1.21	1.22
Cincinnati, OH	7	3	0.75	0.17	1.46	0.61
Cleveland, OH	9	6	0.53	1.10	0.72	1.18
Colorado Springs CO	2	1	0.66	0.72	1.20	0.96
Dallas, TX	5	2	1.10	0.99	1.21	1.09
Daytona Beach, FL	4	2	1.12	1.04	1.17	1.07
Denver CO	4	3	1.16	0.77	1.39	0.83
Detroit MI	7	6	1.09	1.12	1.44	1.44
Dubuque IA	0	0	-	-	-	-
Eugene, OR	2	0	0.31	-	1.49	-
Fort Lauderdale, FL	9	9	0.91	0.93	1.19	1.12
Fort Worth, TX	5	2	1.05	0.90	1.18	1.08
Grand Junction, CO	0	0	-	-	-	-
Honolulu, HI	1	2	0.19	1.50	0.19	1.50
Houma, LA	3	3	1.09	1.17	1.09	1.18
Houston TX	6	3	0.88	0.83	1.13	0.94
Jacksonville, FL	5	2	0.89	0.75	1.30	1.52
Kansas City, MO	3	4	1.21	1.08	1.33	1.34
Killeen, TX	0	0	-	-	-	-
Las Vegas, NV	3	2	1.17	1.09	1.31	1.29
Los Angeles, CA	9	8	1.08	0.96	1.28	1.09
Medford, OR	0	0	-	-	-	-
Miami, FL	9	9	0.89	0.94	1.21	1.15
Minneapolis, MN	2	2	0.88	0.87	1.51	1.44
Modesto, CA	4	3	0.98	1.78	0.99	2.01
Nassau, NY	9	6	0.83	0.78	1.19	1.35
New Haven, CT	7	4	0.84	0.83	1.31	1.37
New York, NY	9	8	0.78	0.81	1.32	1.37
Newark, NJ	5	5	1.03	0.82	1.33	1.33
Norfolk, VA	0	0	-	-	-	-
Oakland, CA	6	3	1.10	1.03	1.22	1.03
Olympia, WA	4	3	0.83	1.51	1.13	1.57
Orange County, CA	9	8	1.10	0.97	1.37	1.15
Philadelphia, PA	7	8	0.91	0.68	1.20	1.32
Phoenix, AZ	6	6	1.07	1.13	1.30	1.36
Pittsburgh, PA	3	2	0.72	0.62	1.07	1.26
Portland, OR	6	6	0.55	0.74	2.36	1.88
Pueblo, CO	2	2	0.66	0.56	1.18	0.69

	No. of plans		Current ratio		Cash + LT bonds divided by current liabilities	
	1998	1999	1998	1999	1998	1999
Riverside, CA	8	7	0.96	0.94	1.32	1.22
Rochester, NY	3	3	0.78	1.17	0.79	1.17
Sacramento, CA	6	2	1.22	1.05	1.26	1.05
St. Louis, MO	4	2	0.86	0.65	1.13	1.38
Salem, OR	4	2	0.58	0.49	1.60	0.51
San Antonio, TX	4	2	0.93	0.97	1.11	1.09
San Diego, CA	5	4	1.34	1.01	1.45	1.07
San Francisco, CA	7	3	1.11	1.36	1.50	1.63
San Jose, CA	5	2	1.14	1.00	1.25	1.00
San Luis Obispo, CA	2	1	1.23	1.36	1.29	1.43
Santa Barbara, CA	2	1	1.22	1.36	1.28	1.43
Santa Rosa, CA	5	3	0.83	1.07	1.11	1.07
Seattle, WA	6	3	0.86	1.50	1.51	1.55
Spokane, WA	2	2	0.38	0.44	1.26	1.29
State College, PA	3	2	0.80	4.00	1.11	1.00
Stockton, CA	4	3	1.08	1.53	1.09	1.68
Tampa, FL	7	3	0.76	0.66	1.53	1.37
Tucson, AZ	5	4	1.01	1.12	1.01	1.28
Vallejo, CA	3	1	1.18	0.85	1.19	0.85
Ventura, CA	6	5	1.11	1.04	1.35	1.21
Washington DC	3	1	1.59	1.16	1.66	1.17
West Palm Beach FL	9	9	0.85	0.84	1.25	1.13
Williamsport, PA	3	1	0.57	1.00	1.49	1.00
Yolo, CA	2	2	1.21	1.19	1.21	1.19

TABLE IV.3

CHANGE IN VALUE OF NET BENEFITS AND TOTAL REVENUES, 1999 TO 2001

Market	Average Value of Total Benefits (in dollars)			Monthly Payment Rates (in dollars)			Monthly Premiums			Percentage Change 1999 to 2001	
	1999	2000	2001	1999	2000	2001	1999	2000	2001	Total Net Benefits	Total Revenues
All Areas	652	697	722	592	606	628	5.70	7.53	14.95	10.7	7.6
Albuquerque	410	438	461	399	430	439	0.00	0.00	0.00	12.3	10.0
Baltimore	659	695	729	606	617	622	0.00	31.43	79.00	10.6	15.7
Boston	600	644	682	559	580	596	8.50	3.80	35.39	13.5	11.2
Cincinnati	550	567	558	494	506	516	6.72	9.72	0.00	1.5	3.1
Cleveland	606	644	639	564	576	587	2.22	1.64	17.03	5.3	6.6
Houston	657	732	766	619	632	644	2.58	0.00	25.00	16.6	7.6
Kansas City	546	586	570	513	526	536	3.42	6.42	4.74	4.3	4.7
Los Angeles	738	789	835	648	661	674	0.00	0.00	6.94	13.2	5.1
Miami	912	1010	1063	778	794	810	0.00	0.00	0.00	16.5	4.0
Minneapolis	421	450	482	429	463	472	68.44	71.41	52.85	14.5	5.6
New Orleans	695	749	745	651	665	678	0.00	2.32	0.00	7.2	4.1
New York	758	816	817	720	734	749	0.48	1.02	0.92	7.8	4.0
Phoenix	580	625	645	509	524	535	5.90	0.00	0.00	11.3	3.8
Portland	408	440	449	408	450	459	30.67	47.43	52.88	10.0	16.8
Seattle	450	497	506	446	483	492	15.77	15.64	35.89	12.5	14.5
Tampa, St. Petersburg	573	617	632	515	528	532	0.00	14.52	13.40	10.4	5.9
High	912	1010	1063	778	794	810	68.44	71.41	79.00	16.6	16.8
Low	408	438	449	399	430	439	0.00	0.00	0.00	1.5	3.1

Source: Actuarial Research Corporation

At the same time, the enrollment-weighted average value of monthly per capita revenues (the sum of the weighted average monthly M+C payment rates and premiums) increased by less than 8 percent. The percentage increase in the value of net benefits exceeded the percentage revenues in 10 of the 16 case study markets.

In five markets the growth rate in the value of benefits exceeded that for revenues by 7 to 12 percentage points—implying that in these markets M+C MCOs experienced a cost squeeze. Those markets were Houston, Los Angeles, Miami, Minneapolis, and Phoenix. For two markets, Portland and Baltimore, the reverse occurred—the percentage increase in revenues exceeded that of net benefits by more than five percentage points. In both of these markets, the net value of supplemental benefits did not change much over the period. Revenues grew faster than benefits partly because of an increase in monthly premiums.³⁶

In all but three of the case study markets, the estimated value of the benefits provided exceeded the sum of the M+C payment rate and monthly premiums. The estimated value of benefits does not reflect differences in health status of M+C enrollees across market areas and MCOs. Therefore it does not reflect the actual cost of providing the benefits to the population enrolled in the plan. Rather, it reflects the value of the benefits, assuming a constant “average” level of utilization across all enrollees. The three markets where the estimated value of benefits provided fell below the revenue stream of M+C payment rates and monthly premiums were Minneapolis, Portland, and Seattle—all markets that provide very modest supplemental benefits.

³⁶ In Baltimore, the increase in average monthly premiums was substantial, from 0 in 1999 to \$79 in 2001. Such a large increase in monthly premiums could indicate that M+C MCOs are under financial stress. In fact, in 2001 three M+C MCOs withdrew from the Baltimore market and the remaining MCOs were closed to new enrollees (Kornfield and Cook, 2001).

V. QUALITY OF CARE PROVIDED BY MEDICARE MCOs

Many M+C MCOs have reacted to cost pressures by reducing benefits, raising premiums, or by leaving the M+C program. In this context, it is particularly important to examine whether these same pressures appear to be affecting the quality of care delivered. We examined how the performance of Medicare managed care MCOs varied across our 69 study markets using quality indicators constructed from two data sources: (1) the Medicare Consumer Assessment of Health Plan Survey (CAHPS) and (2) the Medicare Health Plan and Employer Data Information Set (HEDIS®). Data are available to construct indicators from both of these sources for 1998 and 1999. While we show the results for both years, our discussion focuses primarily on 1999 because results did not change much in the two years.

Overall, Medicare managed care enrollees gave a relatively strong assessment of the care they received through their Medicare MCO. However across some of our CAHPS quality indicators, considerable variation occurred across markets. A significant share of enrollees who felt they needed access to specialty care had a problem obtaining a referral (19 percent across the 69 markets in 1999). And in the lowest-performing markets on this measure, 24 percent to 32 percent of enrollees who felt they needed access to a specialist had problems obtaining a referral in 1999. The proportion of beneficiaries who received flu shots varied greatly across markets according to our CAHPS measures, from a high of 80 percent to a low of 46 percent in 1999.

Our analysis of HEDIS® measures of clinical performance collected through encounter data shows considerable variation in performance across MSAs in the quality of care delivered. Several markets did not perform well on three measures examined: (1) the proportion of enrollees with at least one ambulatory visit in the past year, (2) the proportion of female

enrollees ages 65 to 69 receiving a breast cancer screening during the past two years, and (3) the proportion of diabetics receiving annual eye exams.

Our analysis of MCO performance on quality covers Medicare managed care enrollees in both M+C and cost contracts. Markets with a large share of enrollees in cost contracts were among the top-performing markets under both the HEDIS[®] and CAHPS measures. Medicare MCOs operating under cost contracts have less incentive to contain costs than those operating under M+C contracts. That might contribute to the particularly strong performance of MSAs where a large share of Medicare managed care enrollees are in Medicare cost contracts.

A. RESULTS FROM THE CAHPS SURVEY FOR 1998 AND 1999

1. Methodology

We chose to focus on five areas of performance included in the CAHPS survey:³⁷

1. Rating of overall health plan performance
2. Doctor's listening ability during visits in the past six months
3. Problems in obtaining a referral to access a specialist in the past six months
4. Helpfulness of customer service during the past six months
5. Delivery of flu shot by the health plan or personal doctor last winter

These five measures of performance reflect both access to care as well as beneficiaries' assessment of the quality of care received. These measures represent distinct dimensions of performance that have been identified in prior conceptual and empirical work using Medicare

³⁷The Medicare CAHPS survey, which was initiated in its current form in 1998, is administered by CMS during the fall of each year and is targeted to a sample of 600 Medicare beneficiaries enrolled in each MCO within a M+C or Medicare cost contract. The sample is limited to Medicare beneficiaries who have been continuously enrolled in a Medicare MCO for at least six months. It also covers only MCOs that have had a Medicare contract for more than one year.

CAHPS data (Zaslavsky et al. 2000). We restricted our analysis to Medicare CAHPS respondents living in the 69 MSAs and generated MSA-level estimates for 1998 and 1999.³⁸ (For further details on our methodology and results, see Lake and Rosenbach 2001). The CAHPS survey is targeted to a sample of 600 Medicare beneficiaries enrolled in each MCO with a Medicare +Choice or a Medicare cost contract. Our MSA-level estimates give equal weighting to all Medicare MCOs within the MSA.

2. Results

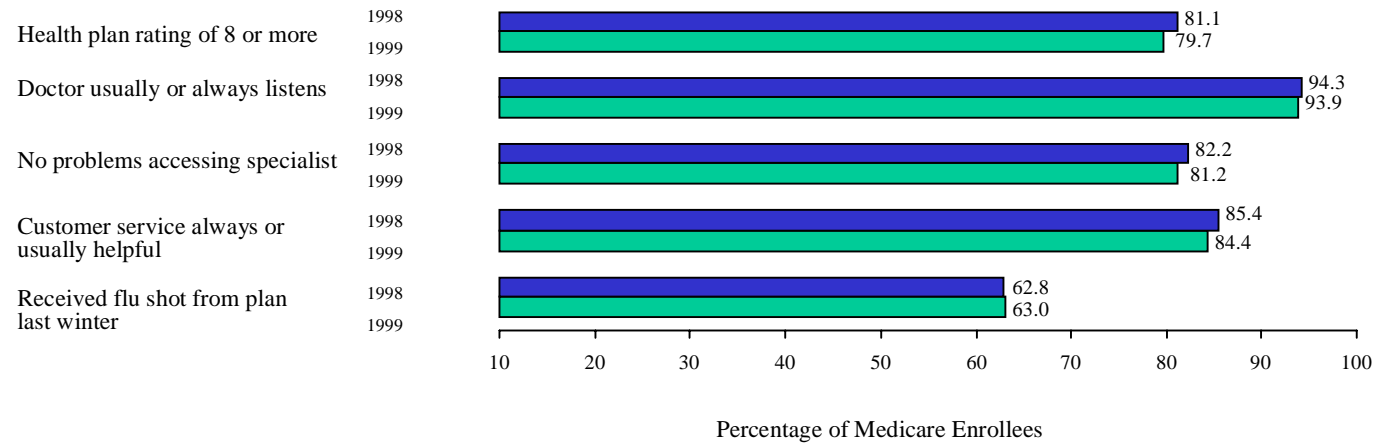
Medicare managed care enrollees gave their health plans and their doctors high rankings in both 1998 and 1999. The differences in the two years are small across each of the indicators, so we focus our discussion on the more recent results for 1999.³⁹ About 80 percent of enrollees across the 69 markets gave their health plan a rating of 8 or above in 1999 (on a scale of 1 to 10, Figure V.1). And 94 percent of enrollees who had visited their doctor in the past six months reported that their doctor usually or always listened carefully. Variation across MSAs was greater in enrollees' overall ranking of their health plan than in their assessment of their doctor's ability to listen (Table V.1).⁴⁰

³⁸ MSA sample sizes ranged from 100 to 3,548, but the majority of MSAs had more than 600 respondents.

³⁹ Across the five measures, we found small decreases in the percentage giving a favorable assessment of performance in 1998 and 1999, as shown in Figure 1. These differences ranged from one to three percentage points.

⁴⁰ For those MSAs ranking at or below the 10th percentile on enrollees overall assessment of their health plan, only 68 percent to 76 percent of enrollees gave their health plan a rating of 8 or higher. While for those MSAs at the 90th percentile and above, 86 percent to 94 percent of enrollees gave their health plan a ranking of 8 or higher. Across all MSAs, the percentage of enrollees who reported that their doctor usually or always listened carefully varied from an average of 87.5 percent in the lowest-ranked MSA on this measure to 98.2 percent in the highest-ranked MSA.

FIGURE V.1
1998 AND 1999 CAHPS MEASURES IN 69 MSAs



Source: 1998 and 1999 Medicare CAHPS data

TABLE V.1
VARIATION IN MEDICARE CAHPS MEASURES AMONG 69 MSAS, 1998 AND 1999

CAHPS Measures ^a	Percentage of Medicare MCO Enrollees	
	1998	1999
Overall rating of health plan is 8 or more (scale 0 to 10)		
Highest ranking MSA	94.1	94.2
90th percentile	87.5	86.3
75th percentile	83.9	82.9
Median MSA	81.8	80.8
25th percentile	79.4	78.2
10th percentile	77.5	75.7
Lowest ranking MSA	70.5	68.2
In past six months, doctor usually or always listened carefully		
Highest ranking MSA	99.1	98.2
90th percentile	96.9	96.4
75th percentile	96.2	95.5
Median MSA	94.5	93.8
25th percentile	93.2	92.8
10th percentile	92.0	91.7
Lowest ranking MSA	89.0	87.5
In past six months, no problems accessing a specialist		
Highest ranking MSA	94.6	94.3
90th percentile	88.8	88.1
75th percentile	86.0	85.8
Median MSA	82.5	81.7
25th percentile	79.5	77.7
10th percentile	76.5	75.0
Lowest ranking MSA	59.0	69.1
In past six months, customer service was usually or always helpful		
Highest ranking MSA	100.0	100.0
90th percentile	92.4	92.7
75th percentile	90.8	89.3
Median MSA	86.6	85.4
25th percentile	83.7	82.1
10th percentile	82.1	79.3
Lowest ranking MSA	78.0	75.9
Received flu shot from health plan or personal doctor during the previous winter		
Highest ranking MSA	83.3	79.9
90th percentile	71.9	74.1
75th percentile	68.0	69.0
Median MSA	62.2	63.0
25th percentile	58.5	60.0
10th percentile	56.2	55.9
Lowest ranking MSA	49.1	46.4

SOURCE: 1998 and 1999 Medicare CAHPS data.

^aPercentiles for each measure are based on separate MSA rankings for 1998 and 1999.

One area where some Medicare MCOs might need to improve their performance is access to specialty care. Of those enrollees who said that they needed to see a specialist, nearly one in five reported that they had a problem obtaining a referral. In 1999, of those enrollees who felt they needed to see a specialist, 6.7 percent reported they had a big problem obtaining a referral and 12.1 percent said they had a small problem obtaining such a referral (Table V.2). Considerable variation existed in these results across MSAs. The lower-performing MSAs are of particular concern. For those MSAs ranked at the 10th percentile and below, one-fourth to one-third of Medicare managed care enrollees who felt that they needed to see a specialist had difficulty obtaining a referral.

On average across the 69 MSAs, 63 percent of enrollees reported that they had received a flu shot from their health plan last winter. Considerable variation occurs across MSAs in this measure, from a low of 46.4 percent to a high of 79.9 percent of enrollees receiving a flu shot. However, differences in performance across MSAs, particularly for this measure, might reflect more differences in traditional practice patterns, or in prevailing attitudes in these communities, rather than differences in MCO behavior, per se.⁴¹

MSAs that consistently ranked in the top half of all MSAs across each of these measures are shown in Table V.3, as are those that consistently ranked in the bottom half. The higher-performing markets appear to represent a range of geographic regions, although several are in the Pacific Northwest (Oregon and Washington). Some of the high-performing markets have a high percentage of enrollees in Medicare cost contracts (Killeen; Medford; Dubuque; Minneapolis; and Eugene). Medicare MCOs have less incentive to contain costs in Medicare

⁴¹ This point was made by a member of our technical advisory panel, Eric Schneider, Harvard School of Public Health, during the development of a design memorandum submitted to CMS in July 2000.

TABLEV.2
RESPONSES TO SELECTED MEDICARE CAHPS SURVEY MEASURES
FOR A SAMPLE OF 69 MSAS, 1999

	Percentage of Medicare Enrollees
Overall rating of health plan	
Less than 5	4.2
5-7	16.1
8	15.4
9	19.0
10	45.3
Sample size	86,342
In last 6 months, doctor listened carefully ^a	
Never	0.8
Sometimes	5.3
Usually	21.7
Always	72.1
Sample size	66,378
In last six months, problems accessing a specialist ^b	
Big problem	6.7
Small problem	12.1
No problem	81.2
Sample size	44,026
In last six months, customer service is helpful ^c	
Never	3.6
Sometimes	12.0
Usually	25.7
Always	58.6
Sample size	27,050
Received a flu shot from health plan or personal doctor last winter?	
No	37.2
Yes	62.8
Sample size	86,151

SOURCE: 1999 Medicare CAHPS data.

^a Among enrollees with a doctor visit in past six months.

^b Among enrollees who said they needed a specialist in past six months.

^c Among enrollees who called their plan's customer service department in past six months.

TABLE V.3

HIGHER- AND LOWER-PERFORMING MSAS ON FIVE MEDICARE CAHPS MEASURES, 1999

	Percentage of Medicare MCO Enrollees				
	Overall Health Plan Rating of 8 or More	Doctor Usually or Always Listens	No Problems Accessing a Specialist	Customer Service Usually or Always Helpful	Received Flu Shot from Plan Last Winter
ALL 69 MSAS	79.7	94.3	81.2	84.4	62.8
Higher-Performing MSAs^a					
Killeen, TX ^b	94.2	98.2	92.7 ^e	97.0	78.1
State College, PA	89.1	97.5	88.2 ^e	95.0	75.2
Baton Rouge, LA	87.0	96.4	83.7	86.2	63.9
Medford, OR ^c	86.4	97.1	88.7	91.0	64.0
Dubuque, IA ^b	86.3	98.1	93.8 ^d	100.0 ^e	79.0
Williamsport, PA	84.6	97.8	94.3	92.7 ^d	70.7
Portland, OR	83.2	94.7	83.8	92.3	72.8
Minneapolis, MN ^c	82.7	95.6	87.0	91.0	78.7
St. Louis, MO	82.7	95.0	84.6	91.9	63.7
Eugene, OR ^c	82.4	95.7	86.6	93.5	66.8
Spokane, WA	82.2	95.9	86.7	87.8	69.8
Lower-Performing MSAs^f					
Sacramento, CA	79.1	93.3	78.7	81.8	62.8
Los Angeles, CA	79.0	92.6	75.0	82.7	62.9
Houston, TX	78.8	91.5	75.6	81.4	55.9
Fort Worth, TX	78.5	92.7	75.5	84.4	56.7
Dallas, TX	78.3	92.8	77.2	81.7	63.0
Phoenix, AZ	78.1	91.9	78.9	83.9	62.4
San Jose, CA	76.2	92.8	77.9	82.6	62.0
Chicago, IL	76.2	91.4	79.7	80.1	56.4
New York, NY	73.0	93.1	78.0	78.3	56.1
Las Vegas, NV	71.3	88.9	70.4	75.9	51.6

SOURCE: 1999 Medicare CAHPS data.

^aIncludes MSAs who consistently ranked in the top half of all 69 MSAs on each of the five measures shown. MSAs are sorted according to percentage of enrollees who gave an overall health plan ranking of 8 or more.

^bAll enrollees are in Medicare cost contracts in this MSA.

^cMore than 25 percent of enrollees are in cost contracts in this MSA.

^dEstimate is based on a sample size of fewer than 100 enrollees.

^eEstimate is based on a sample size of fewer than 50 enrollees.

^fIncludes MSAs that consistently ranked in the bottom half of all 69 MSAs on each of the five measures shown. MSAs are sorted according to percentage of enrollees who gave an overall health plan ranking of 8 or more.

cost contracts, which might contribute to their high performance on these measures. The lower-performing markets are heavily concentrated in the southwest-- California, Texas, Arizona and Nevada.

B. RESULTS FROM ANALYSIS OF HEDIS[®] 1999 AND 2000

1. Methodology

For this analysis we focused on three Medicare HEDIS[®] measures for 1998 and 1999:⁴²

4. The percentage of Medicare MCO enrollees who had an ambulatory medical care visit
5. The percentage of female Medicare MCO enrollees age 65 to 69 who received a breast cancer screening over a two-year period, ending in 1998 or 1999.
6. The percentage of Medicare enrollees diagnosed with diabetes who received an annual eye exam.

These three measures address the health care experiences of Medicare beneficiaries who were continuously enrolled in a Medicare MCO throughout 1998 or 1999. These measures were selected because they address important areas of recommended care for Medicare beneficiaries that were not covered in our earlier analysis of Medicare CAHPS data.⁴³

We restricted our analysis to Medicare HEDIS[®] sample members living in these 69 study markets. For the ambulatory visit measure, MCOs are required to submit data on all eligible, continuously enrolled Medicare beneficiaries. The eye exam measure is limited to those

⁴² Medicare MCOs are not required to submit data on 1999 services (for Medicare HEDIS[®] 2000) if (i) an MCO's first enrollment occurred on February 1, 1999 or later or if its Medicare enrollment was below 1,000 as of July 1, 1999 or (ii) an MCO's contract was terminated on or before January 1, 2000. Similar criteria for participation existed for Medicare HEDIS[®] reporting on 1998 services.

⁴³ These Medicare HEDIS[®] measures for individual Medicare MCOs are now contained in HCFA's Medicare Compare database and are listed on HCFA's Medicare Web page (www.medicare.gov).

diagnosed with diabetes.⁴⁴ The breast cancer screening measure is collected for those with two years of continuous enrollment and is limited to females ages 52 to 69.⁴⁵ For this analysis, we have limited our attention to those ages 65 to 69 because of the different health care needs and delivery patterns of the Medicare under-65 disabled population.

The sample size for eye exams for diabetics and breast cancer screenings are limited even further. For these two measures, Medicare MCOs have a choice of submitting either administrative data on the universe of continuous enrollees meeting the criteria for each measure or data on a random sample of enrollees under a “hybrid” method.⁴⁶ Because the breast cancer screenings and diabetic eye exam measures apply only to a subset of enrollees within each MCO and because MCOs can choose to submit data on a random sample of this relatively small population (rather than the entire population) the number of observations submitted by an MCO within an MSA can be very small. And the sample size for these measures need not be related to an MCO's share of enrollment in the MSA. Therefore, we constructed MCO-level estimates within each MSA and then weighted these estimates by the MCO's share of enrollment to create the MSA-level estimate. For the ambulatory screening measure such weighting was not necessary because MCOs are required to submit data on all of their continuous enrollees. The

⁴⁴Diagnoses of diabetes for HEDIS[®] can be made either through analysis of pharmacy claims data (for example, prescription for insulin) or through medical claims data providing evidence of two face-to-face medical encounters with different dates of service that include a diabetes diagnoses. ICD-9-CM codes are 250, 357.2, 362.0, 366.41, 648.0. (NCQA 1999).

⁴⁵ Breast cancer screenings are recommended every one to two years for those over age 50, but are not necessarily recommended for those age 70 or older, depending on the willingness and appropriateness for particular patients (Goldberg and Chavin 1997).

⁴⁶ For the hybrid method, the systematic sample for relevant measures is developed by selecting every i_{th} member from the entire eligible population of enrollees in the reporting health plan (sorted by last name, first name, date of birth), such that the resulting sample has a desired sample size (NCQA 1999).

sample size for the ambulatory measure already reflects the relative size of the MCO within the MSA.

The sampling approaches for breast cancer screenings and diabetic eye exams were devised for developing MCO level estimates from patient-level, whereas this analysis aggregates patient-level data to the MSA level. In our tables in Appendix C, we have flagged those MSA-level estimates where fewer than 50 observations were submitted for an individual MCO with more than 5 percent of enrollment within the MSA.⁴⁷ The flag indicates that estimates for these MSAs may have somewhat larger variances than those for other MSAs due to the large weights for observations from large MCOs with small samples.

2. Results

Because the overall performance results across the 69 markets did not change much from 1998 through 1999, we focus our discussion here on the most recent results, for 1999. We found substantial variation in performance across the 69 MSAs for all three measures. While in half of the 69 markets, almost 90 percent or more of enrollees received at least one ambulatory visit in 1999, that measure was as low as 52.5 percent to 77 percent for those markets ranked in the bottom 10 percent on this measure (Table V.4). The variance across markets was even greater for our measures on breast cancer screenings and eye exams for diabetics. For women ages 65 to 69, at least 74 percent received a breast cancer screening in half of the 69 markets. However, only 55 percent to 63 percent did so in those markets ranked in the 10th percentile and below on this measure. The results for eye exams for diabetics were relatively low in more than half the study markets. At the 50th percentile, only 64 percent of diabetics received eye exams in 1999. And

⁴⁷ An additional requirement for the flag was that the ratio of the MCO's share in total Medicare managed care enrollment within the MSA relative to the MCO's share of HEDIS observations within the MSA (for a particular estimate) exceed 5.

TABLE V.4
VARIATION IN SELECTED MEDICARE HEDIS[®] MEASURES AMONG 69 MSAS,
IN 1998 AND 1999

HEDIS [®] Measures ^a	Percentage of Medicare MCO Enrollees	
	1998	1999
At least one ambulatory visit during the year, among all enrollees ^b		
Highest ranking MSA	100.0	97.3
90th percentile	95.8	94.9
75th percentile	92.8	93.1
50th percentile	90.1	89.6
25th percentile	85.2	84.2
10th percentile	77.8	76.9
Lowest ranking MSA	63.7	52.5
Breast cancer screening over past two years, among female enrollees ages 65-69 ^c		
Highest ranking MSA	83.9	89.4
90th percentile	80.1	80.2
75th percentile	76.9	77.5
50th percentile	73.8	74.4
25th percentile	67.7	68.3
10th percentile	59.2	63.1
Lowest ranking MSA	45.4	55.1
Eye exam during year, among enrollees with diabetes ^d		
Highest ranking MSA	85.3	84.0
90th percentile	69.4	76.8
75th percentile	61.1	71.9
50th percentile	66.8	64.1
25th percentile	55.1	54.5
10th percentile	34.0	49.4
Lowest ranking MSA	19.5	18.3

SOURCE: Medicare HEDIS[®] 1999 and 2000.

^aPercentiles for each measure are based on separate MSA rankings for 1998 and 1999.

^bIncludes only enrollees age 65 years or older who were continuously enrolled in a Medicare MCO during the year.

^cIncludes only female enrollees age 65 to 69 who were continuously enrolled in a Medicare MCO during the past two years.

^dIncludes only enrollees with diabetes who were continuously enrolled in an Medicare MCO during the year.

for those markets at the 10th percentile and below, only 18.3 to 49.4 percent of diabetics received an eye exam.

The measures for eye exams and breast cancer screenings are likely to have greater variances at the MSA level than the ambulatory care measure. In some instances, MCOs with a very large share of enrollment had a very small sample size on the breast cancer screening and diabetic eye exam indicators within an MSA. The results for all markets on all three indicators are presented in Appendix Tables C1 to C3. For the breast cancer screening and diabetic eye exam estimates, those market-level estimates that are particularly sensitive to an individual MCO that had a significant share of enrollment but submitted a very small number of observations within the MSA are noted.

To identify higher- and lower-performing MSAs, we selected markets that consistently ranked in the top and bottom third of the 69 MSAs for all three measures. The results for these selected MSAs are shown in Table V.5. A large difference exists in the performance of these two groups. Among the higher-performing MSAs, rates of ambulatory care visits ranged from 94 percent to 97 percent whereas among the lower-performing MSAs, these rates varied from 52.5 percent to 85 percent. In the higher-performing MSAs, at least 78 percent to 89 percent of women ages 65 to 69 received a breast cancer screening. This was true for only 55 to 71 percent of women age 65 to 69 in the lower-performing MSAs. And with respect to eye exams for diabetics, in the high-performing MSAs, at least 70 percent of diabetics received an eye exam whereas in the lower-performing MSAs, no more than 57 percent received such an exam.

It is striking that of the 11 top-performing MSAs, 7 have a significant presence of cost contracts. In three of the top-performing markets, all Medicare managed care enrollees were in cost contracts (Dubuque, Killeen, and Grand Junction). And in four other markets, 45 percent to 68 percent of managed care enrollees were in cost contracts in 1999 (Medford, Honolulu,

TABLE V.5
HIGHER AND LOWER PERFORMING MSAS IN 1999
FOR THREE MEDICARE HEDIS® MEASURES

	Percentage of Medicare MCO Enrollees With:		
	At Least One Ambulatory Visit In Past Year	A Breast Cancer Screening In Past Two Years	A Diabetic Eye Exam in Past Year
All 69 MSAs	85.5	72.7	61.0
Higher Performing MSAs			
Dubuque, IA	97.3	79.9	73.4
Williamsport, PA	96.5	84.0	75.1
Medford, OR	96.0	80.2	77.2
Killeen, TX	95.5	89.4	76.4
Grand Junction, CO	95.1	78.8	81.1
Honolulu, HI	95.0	77.7	71.9
Rochester, NY	95.0	81.2	80.4
State College, PA	94.8	83.3	71.6
Salem, OR	94.6	78.2	70.2
Boston, MA	94.5	82.1	72.2
Boulder, CO	93.8	80.5	78.2
Lower Performing MSAs			
Santa Barbara, CA	84.9	64.3	53.5
San Antonio, TX	84.1	55.5	57.3
Miami, FL	83.2	71.4	54.4
Atlanta, GA	79.5	70.6	49.5
Dallas, TX	77.1	55.1	35.7
Baltimore, MD	76.0	64.5	52.8
Houston, TX	74.4	62.0	38.8
Ventura, CA	64.2	65.8	55.7
Chicago, IL	52.5	64.0	50.8

SOURCE: Medicare HEDIS® 2000.

Rochester, and Salem).⁴⁸ MCOs have little incentive to contain costs when operating under a Medicare cost contract, and this might contribute to the high level of performance for MSAs with a large share of Medicare managed care enrollees in cost contracts on both the HEDIS[®] and CAHPS measures.

Five markets were ranked as top performers on both the HEDIS[®] and CAHPS measures: Dubuque, Medford, Killeen, State College, and Williamsport. The first three of those five markets all had a large share of Medicare managed care enrollees in cost contracts. Three MSAs were ranked as low performers on both HEDIS[®] and CAHPS measures: Dallas, Houston, and Chicago.

⁴⁸ The only other market where more than half of the Medicare managed care enrollees were in cost contracts that did not make the top-performing list was Eugene. And that market was a top performer on two of the three measures.

VI. TROUBLED MARKETS

An M+C MCO that faces severe cost pressures may consider reducing benefits, raising premiums, decreasing payments to providers, or finally, leaving the program altogether. In this chapter, we examine those markets where MCOs serving a large share of M+C enrollees chose to take that most drastic action—to leave the program. We consider how those markets differ, if at all, from markets where M+C MCOs serving the large majority of M+C enrollees chose to continue to participate in the program.

In 20 of the 69 study markets, over 30 percent of M+C enrollees were affected by contract withdrawals and service area reductions in a single year during the 1999 to 2001 period. We examined what factors, if any, distinguish these 20 markets from those markets that were more stable over the 1999 to 2001 period.⁴⁹ We define a study market to be stable if no more than 5 percent of beneficiaries were affected by contract nonrenewals and service area reductions in a single year.⁵⁰ Under that definition, 22 of our study markets were stable. The troubled and stable markets are listed below:

We compared our indicators of M+C program performance and market characteristics, including M+C MCO availability, benefit generosity, enrollment, disenrollment, M+C payment rates, and the quality of care delivered for these 20 troubled markets against those same indicators for the 22 relatively stable markets.

⁴⁹ We chose the threshold level of 30 percent of M+C enrollees affected by withdrawals in a single year to define a troubled market both because a break in the data appears at this point, and because we wanted to limit the number of markets defined as troubled to the most severe cases.

⁵⁰ For most of the stable markets, no more than 2 or 3 percent of beneficiaries were so affected in any given year.

Troubled Markets	Stable Markets
Atlanta, Georgia	Bakersfield, California
Baltimore, Maryland	Daytona Beach, Florida
Baton Rouge, Louisiana	Detroit, Michigan
Cincinnati, Ohio	Eugene, Oregon
Cleveland, Ohio	Fort Lauderdale, Florida
Colorado Springs, Colorado	Honolulu, Hawaii
Dallas, Texas	Los Angeles, California
Fort Worth, Texas	Miami, Florida
Houma, Louisiana	Modesto, California
Houston, Texas	Oakland, California
Medford, Oregon	Olympia, Washington
Minneapolis, Minnesota	Orange County, California
Nassau, New York	Pittsburgh, Pennsylvania
New Haven, Connecticut	Philadelphia, Pennsylvania
Norfolk, Virginia	Portland, Oregon
San Luis Obispo, California	Riverside, California
Spokane, Washington	Rochester, New York
State College, Pennsylvania	Salem, Oregon
Washington, D.C.	San Diego, California
Williamsport, Pennsylvania	Santa Barbara, California
	Santa Rosa, California
	Yolo, California

A. OVERVIEW OF THE TROUBLED MARKETS

Across the troubled markets themselves, there is variation with respect to benefit generosity, the level of M+C MCO participation in 1997, and M+C payment rates. Nine of these markets had relatively low M+C payments rates (below the USPCC in 1999) and seven of those nine markets had limited supplemental benefits throughout the 1999 to 2001 period (Table VI.1). Eleven of the troubled markets had M+C payment rates that exceeded the USPCC in 1999 by 5 percent to 28 percent. Those 11 markets had 4 or more participating MCOs and relatively generous benefits in 1999. Three of those 11 markets saw a substantial decline in benefits over the 1999 to 2001 period.

TABLE VI.1

COMPARING MARKETS SIGNIFICANTLY IMPACTED BY MCO WITHDRAWALS TO RELATIVELY STABLE MARKETS

Troubled Markets ^a						Stable Markets ^a				
Market	M+C Payment Rate Relative to USPCC 1999	Number of M+C Contracts 1997 2001		Classification of Benefit Generosity in 2001 ^b		Market	M+C Payment Rate Relative to USPCC 1999	Number of M+C Contracts 1997 2001		Classification of Benefit Generosity in 2001 ^b
M+C PAYMENT RATE EXCEEDS USPCC IN 1999										
Houston, TX	1.28	10	1	modest		Miami, FL*	1.61	9	10	generous
Baton Rouge, LA	1.22	5	2	generous		Ft. Lauderdale, FL*	1.40	10	10	generous
Nassau, NY	1.22	11	4	modest		Los Angeles, CA*	1.34	15	9	generous
Baltimore, MD	1.22	7	2	decline		Detroit, MI	1.31	6	6	generous
Houma, LA	1.17	5	2	generous		Philadelphia, PA*	1.29	11	10	generous
Atlanta, GA	1.13	4	2	modest		Orange County, CA*	1.23	15	9	generous
Cleveland, OH	1.12	11	7	generous		Pittsburgh, PA*	1.23	3	4	modest
Dallas, TX	1.09	8	2	generous		Oakland, PA*	1.21	12	4	modest
New Haven, CT	1.06	8	4	decline		Riverside, CA*	1.13	14	8	generous
Washington, DC	1.06	9	2	decline		San Diego, CA*	1.11	9	6	generous
Fort Worth, TX	1.05	8	2	generous		Bakersfield, CA	1.10	9	7	generous
						Santa Rosa, CA	1.01	6	3	modest

Troubled Markets ^a						Stable Markets ^a				
	M+C Payment Rate Relative to USPCC 1999	Number of M+C Contracts 1997 2001		Classification of Benefit Generosity in 2001 ^b			M+C Payment Rate Relative to USPCC 1999	Number of M+C Contracts 1997 2001	Classification of Benefit Generosity in 2001 ^b	
Market						Market				
M+C PAYMENT RATE BELOW USPCC IN 1999										
Cincinnati, OH	0.99	6	3	generous		Modesto, CA	0.99	4	5	modest
Norfolk, VA	0.91	1	0	limited		Daytona Beach, FL	0.93	4	2	modest
Colorado Springs, CO	0.91	4	1	limited		Yolo, CA	0.93	3	3	modest
Spokane, WA	0.88	5	1	limited		Rochester, NY	0.86	3	3	decline
State College, PA	0.87	1	2	limited		Santa Barbara	0.84	5	3	decline
Minneapolis, MN	0.86	3	2	limited		Olympia, WA	0.83	5	3	limited
Williamsport, PA	0.86	2	1	limited		Portland, OR*	0.83	7	6	limited
San Luis Obispo, CA	0.83	5	1	decline		Honolulu, HI	0.82	1	2	limited
Medford, OR	0.78	1	0	limited		Eugene, OR	0.78	2	2	limited
						Salem, OR	0.78	4	4	limited

Notes:

^a A market is classified as troubled if at least 30 percent of M+C enrollees were affected by contract withdrawals in 1999, 2000 or 2001. A market is classified as stable if fewer than 5 percent of enrollees were affected by contract withdrawals in 1999, 2000 and 2001. These markets are sorted by their M+C payment rate relative to the USPCC in 1999.

^b This refers to the benefit categories defined in Table 3.2. Generous corresponds to markets where benefits were generous in 1999 and at least two MCOs continued to offer drug coverage at a monthly premium of \$25 or less in 2001. Modest refers to markets where benefits were generous in 1999, and some MCOs continued to offer drug coverage at a monthly premium of \$30 to \$55 in 2001. Decline refers to markets where MCOs offered generous benefits in 1999, but not in 2001. Limited refers to markets where M+C MCOs offered only limited supplemental benefits throughout the 1999 to 2001 period.

*Indicates that the market had over 100,000 M+C enrollees in 1998.

Two of the troubled markets lost all participating MCOs by 2001: Medford, Oregon and Norfolk, Virginia. Both of these markets had only one participating risk HMO before the M+C program began. Most of the remaining troubled markets had just one or two participating MCOs by 2001. The exceptions were Nassau, New York and New Haven, Connecticut which each had four participating M+C MCOs in 2001, Cincinnati, Ohio which had three and Cleveland, Ohio which had seven.

We find that the stable markets also varied with respect to benefit generosity and the level of M+C payment rates. But a larger number of the stable markets maintained a relatively generous level of benefits through 2001. Only two of the stable markets saw a substantial decline in benefit generosity over the 1999 to 2001 period (Rochester, New York, and Santa Barbara, California).

B. CONTRASTING TROUBLED MARKETS WITH STABLE MARKETS ACROSS KEY INDICATORS

M+C payment rates are slightly higher on average in stable markets than in the troubled markets. In 1999, the M+C payment rate exceeded the USPCC by 16 percent, on average, across the stable markets, and by 12 percent, on average, across the troubled markets (Table VI.2). In eight of the stable markets, M+C payment rates exceeded the USPCC by 15 percent or more in 1999, this was true in only five of the troubled markets (Table 6.1). However, surprisingly, seven of the stable markets had M+C payment rates that were below 90 percent of the USPCC in 1999 and six of the troubled markets had a payment rate in this range. At first glance, this appears counterintuitive, as one would expect more of the troubled markets to be at the low end of the payment spectrum, since M+C payment rates appear to be a key reason why M+C MCOs have left the program. However, those markets with the lowest payment rates received higher annual

TABLE VI.2

CONTRASTING STABLE MARKETS WITH TROUBLED MARKETS ALONG KEY INDICATORS

Indicator	Troubled Markets			Stable Markets		
	Average	Median	Range	Average	Median	Range
M+C Payment Rate relative to USPCC						
1998	1.10	1.13	(0.83, 1.38)	1.14	1.14	(0.83, 1.73)
1999	1.12	1.14	(0.85, 1.40)	1.16	1.15	(0.85, 1.75)
2000	1.09	1.11	(0.84, 1.33)	1.14	1.13	(0.84, 1.66)
2001	1.05	1.07	(0.82, 1.28)	1.10	1.09	(0.82, 1.60)
Monthly M+C Premium						
1999	\$ 7.8	0	(0, \$65)	\$ 9.80	\$10.10	(0, \$ 62)
2001	\$29.7	\$19.0	(0, \$85)	\$21.3	\$ 5.00	(0, \$114)
Proportion of M+C Contracts with Drug Coverage						
1999	0.84	b	b	0.83	b	b
2001	0.63	b	b	0.75	b	b
Number of M+C Contracts per Market						
1998	6.4	5	(1, 11)	6.8	6.0	(1, 13)
1999	4.6	4	(1, 11)	6.2	5.5	(2, 12)
2000	4.2	4	(1, 10)	6.1	5.5	(2, 12)
2001	2.3	2	(1, 7)	5.4	4.5	(2, 10)
Number if M+C Enrollees per Market						
1998	36,155	34,879	(5,313, 94,325)	84,837	38,570	(6,863, 355,213)
1999	39,082	37,351	(5,654, 96,538)	89,885	46,020	(7,407, 362,097)
2000	39,741	47,169	(3,794, 93,822)	92,344	48,917	(7,890, 363,948)
2001	26,688	28,474	(971, 69,755)	92,916	49,060	(6,818, 359,486)
M+C Penetration Rate						
1998	0.22	0.22	(0.06, 0.35)	0.33	0.37	(0.06, 0.51)
1999	0.23	0.23	(0.07, 0.39)	0.35	0.37	(0.08, 0.52)
2000	0.23	0.22	(0.06, 0.40)	0.38	0.39	(0.09, 0.69)
2001	0.15	0.17	(0.02, 0.32)	0.36	0.39	(0.09, 0.50)

Indicator	Troubled Markets			Stable Markets		
	Average	Median	Range	Average	Median	Range
Herfindahl Index						
1998	0.40	0.31	(0.17, 1.00)	0.45	0.41	(0.17, 1.00)
1999	0.46	0.41	(0.17, 1.00)	0.44	0.40	(0.17, 1.00)
2000	0.52	0.40	(0.18, 1.00)	0.42	0.39	(0.19, 0.92)
2001	0.71	0.66	(0.27, 1.00)	0.42	0.38	(1.19, 0.91)
Voluntary Disenrollment Rate (Percent)						
1998	3.0	3.1	(0.4, 7.5)	1.8	1.6	(0.4, 3.5)
1999	3.7	3.0	(0.9, 14.8)	1.9	1.3	(0.4, 5.0)
2000	3.4	3.2	(0.7, 7.6)	2.8	2.2	(0.3, 10.8)
2001	3.8	3.2	(0.7, 10.3)	3.3	2.4	(1.1, 8.4)
Proportion of Voluntary Disenrollees Returning to FFS Medicare (a)						
1998	0.42	0.36	(0.18, 1.00)	0.41	0.36	(0.13, 0.94)
1999	0.45	0.37	(0.16, 0.96)	0.37	0.33	(0.12, 0.86)
2000	0.57	0.58	(0.27, 0.98)	0.38	0.41	(0.00, 0.73)
2001	0.85	0.89	(0.67, 0.98)	0.50 (b)	0.54	(0.09, 0.93)
HEDIS Indicators for 1999						
Percent with Ambulatory Care Visit	88.3	91.8	(70.7, 96.5)	85.5	85.0	(62.2, 95.0)
Percent with Breast Cancer Screening	71.6	72.1	(55.1, 84.0)	74.0	75.5	(56.1, 81.2)
Percent of Diabetics with eye exam	60.0	61.7	(35.7, 77.2)	63.2	66.2	(18.3, 84.0)
CAHPS measures for 1999						
Overall rating of health plan 8 or more	80.3	79.4	(74.3, 89.1)	82.4	82.3	(71.3, 89.7)
No problems accessing specialist	83.0	82.6	(75.0, 94.3)	80.7	80.1	(70.4, 89.1)
Customer Service usually helpful	85.5	84.9	(76.8, 95.0)	87.0	87.0	(75.9, 94.2)
Received flu shot	62.8	61.2	(55.5, 78.7)	64.6	66.5	(51.4, 77.2)
Doctor Usually Listens Carefully	94.7	94.4	(91.5, 97.8)	93.5	93.7	(87.5, 96.4)

NOTES:

^a This is an unweighted average across the group of markets. Across all the troubled markets, 83 percent of voluntary disenrollees returned to FFS Medicare in 2001. Across the stable markets, 33 percent of voluntary disenrollees returned to FFS Medicare in 2001.

^b We estimated this indicator as the proportion of all basic packages offered in troubled markets as compared to stable markets. Since we did not construct individual market averages, we do not report the median, minimum and maximum for these indicators.

increases in their payment rates (up to the floor level) than did M+C MCOs in higher payment rate counties. Increasing payment rates to the floor level may have both helped to preserve a modest level of benefits and keep MCOs participating in the M+C program in those stable markets.

Troubled markets had fewer M+C enrollees on average than did the stable markets. None of the troubled markets had more than 100,000 M+C enrollees in 1998, whereas ten of the stable markets did.⁵¹ This may be partly an artifact of how we have defined troubled markets. Larger markets may have had a large number of beneficiaries affected by withdrawals, but it is more difficult to meet the threshold of 30 percent of beneficiaries being affected in a single year in markets of over 100,000 M+C enrollees. The stable and troubled groups have similar proportions of small markets, however. In 1998, before MCO withdrawals had affected the troubled markets, half of those markets had fewer than 35,000 enrollees, and half of the stable markets had fewer than 39,000 enrollees.

M+C penetration rates are also higher among the stable markets, compared to the troubled markets. In 1998 the M+C penetration rate averaged 22 percent across the troubled markets, and 33 percent across the stable markets. None of the troubled markets had a penetration rate above 35 percent, whereas the stable markets had penetration rates of up to 51 percent. As MCO withdrawals began to affect the troubled markets, the average M+C penetration rate declined to 15 percent in 2001. For the stable markets, the M+C penetration rate increased slightly to 36 percent on average by 2001.

Troubled markets were somewhat less concentrated than stable markets initially, as measured by the Herfindahl Index in 1998 (0.40 and 0.45 respectively). The Herfindahl Index is

⁵¹ Those markets with over 100,000 M+C enrollees in 1998 are noted in table 6.1.

equal to the sum of the square of market shares of participating M+C MCOs (where market share is measured by the M+C MCOs' share in total M+C enrollment in the market). If there is only one M+C MCO in the market, then the index takes a value of 1.00.⁵² As M+C MCOs left troubled markets, those markets became more concentrated and the Herfindahl Index rose from an average of 0.40 in 1998 to 0.71 in 2001 for these markets. Concentration remained largely unchanged across the stable markets—the Herfindahl Index decreased slightly from 0.45 in 1998 to 0.42 on average in 2001.

The stable and troubled markets did not differ dramatically in benefit generosity in 1999, and in fact, the troubled markets were slightly more generous on average. Monthly premiums were actually lower in the troubled markets in 1999 at almost \$8 per month, compared to \$10 per month in the stable markets. And the proportion of MCOs offering drug coverage in their basic package were similar as well at 84 percent for troubled markets and 83 percent for stable markets. However, by 2001 that had turned around as the troubled markets saw a more dramatic decline in benefit generosity than the stable markets. Monthly premiums increased more quickly in the troubled markets and the proportion of MCOs offering drug coverage declined more rapidly. Premiums averaged almost \$30 per month in the troubled markets whereas they averaged just \$21 per month in the stable markets in 2001. The proportion of contracts offering drug coverage fell to 63 percent in the troubled markets, and remained much higher at 75 percent across the stable markets in 2001.

Voluntary disenrollment rates (the proportion of M+C enrollees that choose to leave their MCO during the first quarter of each year), and the proportion of voluntary disenrollees that

⁵² Occasionally, an M+C MCO contract is available in the market, but has not yet enrolled any beneficiaries. Such contracts do not factor into this calculation.

return to FFS Medicare show beneficiary response to the changes that are happening in these markets.⁵³ We would expect voluntary disenrollment rates to be higher, and the proportion of beneficiaries returning to FFS Medicare to be higher in troubled markets relative to stable markets. As expected, in all years, voluntary disenrollment rates were slightly higher on average in troubled markets than in the stable markets. And the average proportion of voluntary disenrollees who chose to return to FFS Medicare was just over 40 percent across both troubled and stable markets in 1998. However, this average proportion returning to FFS Medicare increased much more rapidly across the troubled markets as compared to the stable markets. In the average troubled market, over half of all voluntary disenrollees returned to FFS Medicare in 2000, and 85 percent did so in 2001. The average proportion of voluntary disenrollees returning to FFS Medicare increased in the stable markets as well, though not as dramatically, from 41 percent in 1998 to 50 percent in 2001. The higher proportion of voluntary disenrollees returning to FFS Medicare in troubled markets reflects in part the lack of other M+C options, as well as reduced beneficiary confidence in the stability of the M+C program.

On measures of quality, the troubled markets and stable markets were very similar in 1999—the latest year for which quality data is available. This is reassuring—those pressures that are causing M+C MCOs to leave the market do not appear to be affecting the quality of care delivered. However, before drawing any firm conclusions, it would be important to analyze quality data for later years as well. The percent of beneficiaries that gave their health plan a rating of 8 or above averaged 80 percent across the troubled markets, and 82 percent across the stable markets in 1999. The percent of enrollees who reported no problems in accessing their

⁵³ Our voluntary disenrollment estimates exclude those enrollees affected by contract nonrenewals and service area reductions. We also exclude deaths from our count of voluntary disenrollees.

specialist averaged 83 percent across the troubled markets and 81 percent across the stable markets. In fact the highest performing market on this measure was a troubled market. The averages across the markets for each of the CAHPS measures differed by no more than 2 percentage points across the stable and troubled markets. The HEDIS measures were also close across both groups, with the troubled markets performing slightly better on average with respect to the proportion of enrollees receiving an ambulatory care visits. The stable markets performed slightly better on average with respect to breast cancer screenings and eye exams. In stable markets 74 percent of women age 65 to 69 received a breast cancer screening over the previous two years, compared to 72 percent for troubled markets, on average. And across the stable markets, the proportion of diabetics that received an eye exam during the previous year averaged 63 percent, whereas the average was 60 percent for the troubled markets. These two indicators vary widely across health plans within the same market, and across markets as well (see chapter 5).

C. SUMMARY

Troubled markets (those experiencing contract withdrawals affecting at least 30 percent of M+C enrollees in a single year over the 1999 to 2001 period) were similar to stable markets on 1998 characteristics such as benefit generosity and the number of participating MCOs. Troubled markets also differed from stable markets in that they were smaller—none of the troubled markets had over 100,000 M+C enrollees in 1998, whereas ten of the stable markets exceeded that size. And troubled markets had a lower average level of M+C penetration than the stable markets in 1998. Benefit generosity declined much more rapidly in the troubled markets compared to the stable markets over the 1999 to 2001 period. And not surprisingly, as a result of the MCO withdrawals, the number of participating MCOs fell as did the M+C penetration rates

across the troubled markets. Market concentration increased on average in the troubled markets over the 1999 to 2001 period whereas it declined slightly in the stable markets.

The average voluntary disenrollment rate was somewhat higher across the troubled markets compared to the stable markets across the 1998 to 2001 period. And as beneficiaries reacted to the instability in these markets, a higher proportion of voluntary disenrollees returned to FFS Medicare in the troubled markets, on average. The HEDIS and CAHPS indicators for 1999 show that the quality of care delivered in troubled markets is of similar quality to that delivered across the stable markets. The averages and ranges on the quality indicators are similar for these two sets of markets, indicating that as of 1999 the quality of care delivered did not appear to be affected by the financial pressures that caused many M+C MCOs to leave the troubled markets.

VII. CONCLUSION

Prior to BBA 1997, enrollment in Medicare managed care was growing, and many of its enrollees had access to prescription drug benefits at no monthly premium. Yet Medicare managed care was primarily an urban program, as many rural counties (where payment rates are much lower) did not have any participating MCOs. In addition, wide variation existed in the generosity of benefits across those counties where Medicare managed care was available. In attempting to reduce these disparities, the BBA 1997 increased the payment rates in some mainly rural counties to a floor level and expanded the types of organizations that are eligible to participate. However, it did not succeed in reducing the geographic inequities in the availability of Medicare managed care or in the generosity of benefits. Rather, over the 1999-to-2001 period, many M+C MCOs exited the program and the majority of those that remained either reduced their benefits, increased their premiums or both. Some of our study markets were hit much harder by these changes than others, and this was partly a function of payment rates. Enrollment in Medicare managed care declined for the first time in 2000.

These are signs of a program in trouble. The decline in M+C MCO participation and benefit generosity is not surprising given the low rate of increase in M+C payment rates for many counties following BBA 1997. Beneficiaries have reacted to these changes as an increasing proportion of enrollees affected by contract withdrawals are returning to FFS Medicare, as are voluntary disenrollees. Yet, while the changes brought about by BBA 1997 are problematic, M+C MCO benefits still compare favorably to traditional Medicare supplemented with Medigap coverage and performance on quality indicators is generally good. While there is some room for improvement in the quality of care delivered in some of our study markets, across the majority of those markets, M+C MCOs continue to deliver health care services of solid quality and to offer prescription drug coverage at a reasonable monthly premium (averaging \$24 per month).

Medicare managed care therefore remains an important source of supplemental coverage, particularly for Medicare beneficiaries who lack employer-based coverage and do not have access to Medicaid. As M+C MCO withdrawals expected for 2002 continue to be high, though less than in 2001, policymakers need to consider how to bring stability to this program.

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APPENDIX TABLES

TABLE A.1

OVERVIEW OF INDICATORS AND DATA SOURCES

Indicators	Data Sources
MEDICARE+CHOICE ENROLLMENT AND AVAILABILITY (DECEMBER 1997–MARCH 2000)	
Number of M+C contracts with MCOs	CMS Geographic Service Area (GSA) File for various quarters CMS State/County Plan Market File
Percent distribution of Medicare beneficiaries by the number of M+C contracts available in their county of residence	CMS GSA File for various quarters CMS State/County/Plan Market Penetration File for various quarters
Number of Medicare beneficiaries	CMS State/County Penetration File for various quarters
Number of M+C enrollees	CMS State/County/Plan Market Penetration File for various quarters
Market share of largest M+C contract	CMS State/County/Plan Market Penetration File for various quarters
Herfindahl Index of Market Concentration	Sum of market shares of participating M+C MCOs within an MSA
M+C penetration rate	Number of M+C enrollees divided by number of beneficiaries
MARKET STABILITY (1999–2001)	
Number of M+C contracts with a pullout (withdrawal or service area reduction)	CMS data files on nonrenewals and service area reductions
Number of enrollees affected by pullouts	State/County/Plan Market Penetration Files CMS data files on nonrenewals and service area reductions
Percent of enrollees affected by pullouts	State/County/Plan Market Penetration Files CMS data files on nonrenewals and service area reductions
BENEFITS IN BASIC PACKAGE (1999 TO 2001)	
Percent of contracts offering coverage for: Prescription drugs Vision Dental examinations Physical examinations Percent of M+C contracts with a zero premium Average premium Average prescription drug cap	Medicare Compare for 1999 and 2000 CMS Plan Benefit Package Database for 2001

TABLE A.1 (continued)

Indicators	Data Sources
ACCESS AND QUALITY MEASURES	
Percentage of Medicare MCO enrollees who: Gave their health plan a rating of 8 or more (on a scale of 0 to 10) Said that their personal doctor usually or always listened carefully, among those who visited a doctor in the past six months Had no problems gaining access to a specialist, among those who needed a specialist during the past six months Said that customer service was usually or always helpful, among those who contacted customer service during the past six months Received a flu shot from the health plan or personal doctor last winter	Consumer Assessment of Health Plans Survey (CAHPS), 1998 and 1999
Percentage of Medicare MCO enrollees with: At least one ambulatory visit in the past year ^a Breast cancer screening in the past two years ^b Eye exam in the past year for diabetics ^c	Health Plan Employer Data and Information Set (HEDIS), 1999 (data covers health care services for 1998)
VOLUNTARY DISENROLLMENT RATES	
Quarterly disenrollment rates Percentage of disenrollees who returned to traditional Medicare Percentage of disenrollees who had been enrolled for three months or less	Group Health Plans Files, 1998, 1999 and 2000 GSA file for same years State/County/Plan Market Penetration Files
FINANCIAL PERFORMANCE MEASURES^d	
Average operating profit margin Average overall profit margin Average overall expense ratio Average current ratio Average cash and long-term bonds divided by current liabilities Average days in unpaid claims	Adjusted Community Rate Proposal Submissions, 2000 and 2001 (data are for 1998 and 1999)

^aIncludes only enrollees age 65 or older who were continuously enrolled in a Medicare MCO in 1998

^bIncludes only female enrollees age 65 to 69 who were continuously enrolled in a Medicare MCO during 1997 and 1998

^cIncludes only enrollees with diabetes who were continuously enrolled in a Medicare MCO in 1998.

^dDefinitions of financial performance measures:

Operating profit margin: Ratio of operating profit to operating revenue. Higher values indicate higher performance.

Overall profit margin: Ratio of total profit to total revenue. Higher values indicate higher performance.

Overall expense ratio: ratio of direct medical cost plus administrative cost to operating revenue. Higher values indicate lower performance.

Current ratio: Ratio of current assets to current liabilities. Higher values indicate higher liquidity.

Current assets and long-term bonds divided by current liabilities: Ratio of the sum of current assets and long-term bonds to current liabilities. Higher values indicate higher liquidity.

Days in unpaid claims. Ratio of claims payable to hospital and medical expenses divided by 365. Higher values indicate lower efficiency.

APPENDIX B

METHODOLOGY FOR THE ACTUARIAL ANALYSIS OF PLAN BENEFITS

Actuarial Research Corporation analyzed the benefits offered under the basic (lowest premium) packages in the largest counties within each of the 16 case study markets. The market areas and municipalities included in this analysis are:

- **Albuquerque, New Mexico** – Bernalillo County
- **Baltimore, Maryland** – Baltimore County and Baltimore City
- **Boston, Massachusetts** -- Bristol, Essex, Middlesex, and Norfolk counties
- **Cincinnati, OH** – Hamilton County
- **Cleveland, OH** – Cuyahoga County
- **Houston, TX** – Harris County
- **Kansas City, Missouri and Kansas** -- Jackson County, Missouri, and Johnson County, Kansas
- **Los Angeles, California** -- Los Angeles County
- **Miami, Florida** – Dade County
- **Minneapolis, Minnesota** – Hennepin and Ramsey counties
- **New Orleans, Louisiana** – Jefferson and Orleans parishes
- **New York, New York** – Bronx and Queens boroughs, New York City and Kings County
- **Phoenix, Arizona** – Maricopa County
- **Portland, Oregon** – Multnomah and Washington counties
- **Seattle, Washington** – King County
- **Tampa, St. Petersburg, Florida** – Hillsborough and Pinellas counties

The basic package is defined to be the lowest premium package an M+C contract offers in a county. If more than one package under same contract and within the same county has the same low premium, the package with lower copayments was used, followed by a more generous drug benefit (see Appendix). Focusing on the basic package gives a picture of the threshold level of coverage available to M+C enrollees in each year. From those basic M+C benefit packages, the actuarial model generates two basic estimates:

- *Net benefits* are the estimated dollar value of the coverage that the basic packages provide in the market area.⁵⁴ This is equal to the average monthly value of the health services covered, after excluding patient cost sharing (net of patient cost sharing). Two types of benefits are specified:
- *Net traditional benefits* reflect the average dollar value that the basic packages provide for the types of health services used by an enrollee that are covered by Medicare Parts A and B (such as physician and hospital visits). This estimate includes any beneficiary cost sharing that traditional Medicare requires which the M+C MCO covers.⁵⁵
- *Net supplemental benefits* are the estimated dollar value of coverage an M+C MCO provides for health services not covered by traditional Medicare. These consist of prescription drugs, dental services, chiropractors, podiatrists, eye exams, glasses, hearing exams and hearing aids. Our use of the term supplemental benefits here differs somewhat from the standard CMS definition for the M+C program.⁵⁶

⁵⁴ This is equivalent to the projected average cost for all beneficiaries enrolled in the M+C program.

⁵⁵ For example, M+C MCOs frequently have lower copays for physician visits than traditional Medicare. The value of net traditional benefits reflects the fact that M+C MCOs generally cover a larger share of the cost of those health services traditionally covered by Medicare because beneficiary cost sharing for these services is lower.

⁵⁶ This analysis does not include optional supplemental benefits that the enrollee must pay an additional amount, beyond the monthly premium, to obtain. It does include both additional benefits that cover the services described above (prescription drugs, dental services, etc.) and mandatory supplemental benefits.

- *Patient cost sharing* is the estimated average expenditures a Medicare beneficiary enrolled in the M+C plan incurs for health services used given the benefit structure of the M+C plan. This includes copays, co-insurance, and any services that exceed annual limits or are not covered by the plan (such as prescription drugs). Separate estimates distinguish between cost sharing associated with health services that fall under traditional Medicare and those services not covered by traditional Medicare (listed under the definition of net supplemental benefits above).

In addition to the cost of the health services provided, and the division of those costs between what the plan covers and what the patient pays for, our analysis examines the weighted average premiums that beneficiaries pay and the M+C payments that the MCO receives. We define the term monthly revenues to be the sum of the weighted average M+C monthly payment rate and the weighted average monthly premium charged by MCOs for the benefit packages examined in the market area.

Estimates for each market area are weighted by enrollment, giving greater weight to the basic packages of MCOs serving more of the beneficiaries within each market. These estimates can be combined, depending on the question of interest. For example, beneficiary out-of-pocket spending is the patient cost sharing plus any monthly premium for the basic benefit package.⁵⁷ The share of health care costs that enrollees pay is beneficiary cost sharing divided by net benefits plus cost sharing. All estimates are on a monthly basis (and can be multiplied by 12 to get annual costs).

For all services except prescription drugs, the actuarial model holds utilization constant over time and across geographical service area. Given the rapid rate at which the utilization of

⁵⁷ We have not included the Medicare Part B premium which enrollees pay in addition to any premium required by the MCO for their basic benefit package in our analysis.

prescription drugs is increasing nationally, the actuarial model includes utilization increases over time for this component of services. The price of health services increases over time and also varies across service areas in the actuarial model. The exception again is prescription drugs for which there is no geographical variation in price, but price and utilization does increase over time. Estimates that remove the geographic variation in price across markets are also presented. The method for removing geographic variation in price is discussed in ARC's report (Trapnell and Peppe, 2001).

To facilitate cross-market comparisons, we present both an enrollment-weighted average across all areas included in the analysis as well as simple averages of the market-level estimates. The enrollment-weighted averages indicate what an "average" beneficiary had in total net benefits across these 16 market areas. The simple averages, which give equal weight to the estimates for each case study market (rather than giving greater weight to markets with more M+C enrollees), approximate an average market. We can therefore compare an individual market's performance with the "average" performance of a market.

In our original report on this topic (Cook, 2001) we also presented adjusted estimates of the net value of benefits that remove the geographical variation in prices. Because for these estimates the model holds both utilization and price constant across markets in a given year, the variation in the estimated value of net benefits across markets can be accounted for entirely by differences in the generosity of benefits across the markets. These adjusted estimates provide a useful way of comparing how benefits vary across markets and whether the variation has increased over time.

These estimates have several caveats and limitations. The benefit and premium data are drawn from Medicare Compare. The depth of the information available on benefits in Medicare.

Compare increased over the 1999-to-2001 period, and how those benefits were characterized changed in some dimensions as well. Because of those changes, caution must be used in interpreting the exact dollar amount by which benefits changed over time.⁵⁸ The estimates are intended to be used to examine general trends over time in the value of benefits and patient cost sharing within and across the case study markets.

We know that many M+C MCOs left the program between 1999 and 2001. These actuarial estimates are for the plans available in each year in each market area (and with data in Medicare Compare). Changes in benefit values over time therefore reflect the differing composition of plans across years. For example, benefits may become less generous over time either because individual MCOs reduced their benefits or because MCOs with relatively more generous benefit packages left the market area.

Also, our analysis focuses only on the basic (lowest premium) package offered. MCOs may offer more than one plan to beneficiaries living in the same county. Since enrollment data by plan is not available, this analysis assesses the threshold level of benefits available through the basic package, but does not account for more generous plans that beneficiaries may have purchased for a higher premium. The analysis, therefore, also does not account for how the benefits offered in those more generous packages have changed over time (and/or whether they have ceased to be offered). For more details on the methodology used to calculate these estimates, see the ARC report (Trapnell and Peppe, 2001).

⁵⁸ For further details on how changes in Medicare Compare may affect the estimates, see Trapnell and Peppe, 2001.

Finally, the actuarial estimates hold utilization constant across geographical areas and time. This provides for a valid comparison of how the generosity of benefits has changed over time, and how it varies across markets for an “average” enrollee. However, these estimates do not account for differing demographic characteristics (including health status) of enrollees across markets or plans. The estimates therefore do not reflect the actual cost to the plan and are not designed to allow us to analyze directly changes in the profitability of MCOs. We do discuss general trends in how both the value of net benefits and revenues have changed over time.

TABLE C.1

AMBULATORY VISIT RATES AMONG MEDICARE MANAGED CARE ENROLLEES
IN 69 MSAS NATIONWIDE, 1998 AND 1999

MSA	At Least One Ambulatory Visit in the Past Year				Percentage Point Difference (1999-1998)
	1998		1999		
	Percentage of Medicare MCO Enrollees ^a	Sample size	Percentage of Medicare MCO Enrollees ^a	Sample size	
All 69 MSAs	86.8	2,993,763	85.5	3,484,484	-1.3
Albuquerque, NM	95.7	13,422	89.6	27,007	-6.1
Atlanta, GA	90.9	18,551	79.5	23,981	-11.4
Bakersfield, CA	77.9	20,243	62.2	22,620	-15.7
Baltimore, MD	82.1	23,782	76.0	39,777	-6.1
Baton Rouge, LA ^c	91.1	14,211	94.1	10,099	3.0
Boston, MA	95.2	112,017	94.5	138,314	-0.7
Boulder, CO	96.0	6,799	93.8	8,366	-2.2
Chicago, IL	63.7	59,103	52.5	107,393	-11.2
Cincinnati, OH	92.1	29,838	91.8	31,562	-0.3
Cleveland, OH	85.2	59,765	90.3	69,480	5.1
Colorado Springs, CO	90.0	10,436	94.9	14,597	4.9
Dallas, TX	74.6	38,837	77.1	34,479	2.5
Daytona Beach, FL	96.5	21,191	94.9	31,006	-1.6
Denver, CO	93.3	71,149	91.3	72,208	-2.0
Detroit, MI	89.3	22,980	89.1	38,782	-0.2
Dubuque, IA ^b	92.0	188	97.3	3,726	5.3
Eugene, OR	96.1	17,487	93.1	18,380	-3.0
Fort Lauderdale, FL	88.9	89,434	89.1	76,055	0.2
Fort Worth, TX	89.4	37,089	91.8	39,656	2.4
Grand Junction, CO	96.3	7,037	95.1	6,987	-1.2
Honolulu, HI	98.5	10,713	95.0	35,540	-3.5
Houma, LA	91.6	4,594	93.0	5,076	1.4
Houston, TX	65.2	30,579	74.4	70,893	9.2
Jacksonville, FL	86.2	25,020	86.4	29,929	0.2
Kansas City, MO	91.2	37,067	84.2	40,676	-7.0
Killeen, TX	100.0	6,944	95.5	8,274	-4.4
Las Vegas, NV	88.6	49,366	89.4	46,215	0.8
Los Angeles, CA	82.5	259,127	80.6	314,721	-1.9
Medford, OR	95.7	8,405	96.0	7,530	0.3
Miami, FL	85.5	93,418	83.2	87,373	-2.3
Minneapolis, MN	90.1	31,273	91.3	56,782	1.2
Modesto, CA	88.8	19,141	85.9	20,578	-2.9
Nassau, NY	92.8	43,823	92.0	51,286	-0.8
New Haven, CT	83.0	38,824	94.5	47,564	11.5
New York, NY	89.0	98,903	88.9	105,961	-0.1
Newark, NJ	90.0	12,153	89.8	13,226	-0.2
Norfolk, VA ^{b,c}	94.6	6,781	70.7	-- ^d	-- ^d
Oakland, CA	90.3	83,408	84.6	104,143	-5.7
Olympia, WA	77.0	7,392	71.5	8,920	-5.5

TABLE C.1 (continued)

MSA	At Least One Ambulatory Visit in the Past Year				Percentage Point Difference (1999-1998)
	1998		1999		
	Percentage of Medicare MCO Enrollees ^a	Sample size	Percentage of Medicare MCO Enrollees ^a	Sample size	
Orange County, CA	78.5	83,308	79.2	103,824	0.7
Philadelphia, PA	93.2	102,690	92.6	158,874	-0.6
Phoenix, AZ	84.6	121,728	85.0	124,336	0.4
Pittsburgh, PA ^c	90.2	104,565	83.9	41,248	-6.3
Portland, OR	92.5	74,113	89.7	80,429	-2.8
Pueblo, CO	93.3	7,468	94.5	6,700	1.2
Riverside, CA	83.1	141,115	78.5	130,897	-4.6
Rochester, NY	91.7	313	95.0	23,204	3.3
Sacramento, CA	90.7	42,144	88.7	77,617	-2.0
St. Louis, MO	82.6	55,584	87.3	73,706	4.8
Salem, OR	94.6	14,435	94.6	16,349	-0.0
San Antonio, TX	75.5	43,313	84.1	53,734	8.6
San Diego, CA	84.6	138,300	85.0	147,948	0.4
San Francisco, CA	88.4	63,493	90.7	84,857	2.3
San Jose, CA	91.6	50,796	89.9	61,613	-1.7
San Luis Obispo, CA	90.1	7,112	91.2	8,249	1.1
Santa Barbara, CA	86.9	11,551	84.9	16,613	-2.0
Santa Rosa, CA	90.1	23,161	84.8	25,329	-5.3
Seattle, WA	86.4	59,202	87.8	79,615	1.4
Spokane, WA	88.4	8,747	93.3	8,767	4.9
State College, PA	96.2	4,450	94.8	5,333	-1.4
Stockton, CA	79.1	14,944	89.3	20,701	10.2
Tampa, FL	88.0	114,842	86.2	90,490	-1.8
Tucson, AZ	90.3	46,388	92.2	44,894	1.9
Vallejo, CA	91.6	18,823	89.8	21,423	-1.8
Ventura, CA	76.4	25,563	64.2	25,222	-12.2
Washington, DC	77.6	2,423	81.8	20,634	4.2
West Palm Beach, FL ^c	91.5	65,703	92.3	49,009	0.9
Williamsport, PA	95.3	5,110	96.5	6,940	1.2
Yolo, CA	92.9	1,889	83.2	6,709	-9.6

SOURCE: Medicare HEDIS® 1999 and 2000

^aIncludes only enrollees age 65 years or older who were continuously enrolled in a Medicare MCO in 1998 or 1999.^bSample size is less than 200 in either 1998 or 1999.^cSample size declined by 25 percent or more between 1998 and 1999. Further investigation is required to account for these decreases.^dAll MCOs withdrew in 2000 and did not report HEDIS® measures for 1999.

TABLE C.2

BREAST CANCER SCREENING RATES AMONG FEMALE M+C ENROLLEES
IN 69 MSAS NATIONWIDE, 1998 AND 1999

	Breast Cancer Screening in Past Two Years				Percentage Point Difference (1999-1998)
	1998		1999		
	Percentage of Medicare MCO Enrollees ^a	Sample size	Percentage of Medicare MCO Enrollees ^a	Sample size	
All 69 MSAs	71.7	172,486	72.9	198,018	1.1
Albuquerque, NM	80.1	580	68.3	799	-11.8
Atlanta, GA	70.7 ^d	1,440	70.6 ^d	2,238	-0.1
Bakersfield, CA	59.2 ^d	286	73.6 ^d	837	14.4
Baltimore, MD	59.2 ^d	1,307	64.5	998	5.3
Baton Rouge, LA ^c	54.0	1,518	74.8	1,078	20.8
Boston, MA	81.7	12,624	82.1	15718	0.3
Boulder, CO	70.3 ^d	667	80.5	1,092	10.1
Chicago, IL	48.7	1,030	64.0 ^d	1,061	15.2
Cincinnati, OH	67.0	774	67.0	1,263	0.0
Cleveland, OH	74.1	4,859	74.4	6,187	0.4
Colorado Springs, CO	76.9	225	72.1	1,573	-4.7
Dallas, TX	59.7 ^d	689	55.1	1,695	-4.6
Daytona Beach, FL	83.4	1,534	79.8	1,625	-3.6
Denver, CO	75.9	6,562	73.5	10,174	-2.4
Detroit, MI ^c	72.0 ^d	5,070	76.5 ^d	3,531	4.5
Dubuque, IA ^b	76.0	50	79.9	98	3.9
Eugene, OR	71.7	1,507	75.3	1,876	3.6
Fort Lauderdale, FL ^c	75.2	4,718	75.8 ^d	2,703	0.6
Fort Worth, TX ^c	71.1	3,050	72.2	3,839	1.1
Grand Junction, CO	77.8	944	78.8	1,112	1.0
Honolulu, HI	83.9	1,749	77.7	4,134	-6.3
Houma, LA ^b	55.1	198	67.0	526	12.0
Houston, TX	57.0	1,001	62.0	2,635	4.9
Jacksonville, FL	73.5	2,003	66.1	1,878	-7.4
Kansas City, MO	75.2	2,170	76.3	2,330	1.1
Killeen, TX	83.3	228	89.4	199	6.1
Las Vegas, NV	63.3	1,517	63.3	3,496	0.0
Los Angeles, CA	72.6	2,400	71.6	4,468	-1.0
Medford, OR	77.1	594	80.2	743	3.0
Miami, FL ^c	69.3	8,542	71.4	2,550	2.1
Minneapolis, MN ^c	75.9	1,757	82.4 ^d	849	6.5
Modesto, CA	74.0	606	75.7	1,295	1.7
Nassau, NY ^c	70.0	5,396	71.3	1,729	1.3
New Haven, CT	79.8 ^d	1,757	78.1 ^d	2,942	-1.7
New York, NY ^c	65.3	11,508	71.9	2,081	6.7
Newark, NJ	45.4 ^d	607	63.1	1,105	17.7
Norfolk, VA ^c	73.3	750	e	,e	e
Oakland, CA	76.5	11,148	77.1	12,942	0.7
Olympia, WA ^b	80.1	108	56.1	509	-24.0

	Breast Cancer Screening in Past Two Years				Percentage Point Difference (1999-1998)
	1998		1999		
	Percentage of Medicare MCO Enrollees ^a	Sample size	Percentage of Medicare MCO Enrollees ^a	Sample size	
Orange County, CA	72.0	742	71.6	1,582	-0.4
Philadelphia, PA	73.8	2,272	70.3	3,427	-3.5
Phoenix, AZ	74.5	1,558	71.9	2,986	-2.6
Pittsburgh, PA	70.1	10,386	73.1	13,056	3.0
Portland, OR	77.4	2,995	71.6	7,746	-5.8
Pueblo, CO ^b	71.1	172	75.4 ^d	752	4.3
Riverside, CA	75.5	1,710	77.5	1,861	1.9
Rochester, NY ^b	N/A	N/A	81.2	455	
Sacramento, CA	70.2	6,776	74.8	8,660	4.5
St. Louis, MO	73.9	4,015	76.5	5,286	2.6
Salem, OR	79.0	1,374	78.2	1,895	-0.8
San Antonio, TX	65.6	970	55.5	3,226	-10.1
San Diego, CA	73.7	1,240	74.6	2,434	0.9
San Francisco, CA	74.2 ^d	6,809	78.0 ^d	8,414	3.8
San Jose, CA	73.2	5,498	79.0	6,314	5.7
San Luis Obispo, CA ^b	76.7	120	56.1	143	-20.6
Santa Barbara, CA	67.7	478	64.3	835	-3.4
Santa Rosa, CA	74.6 ^d	2,806	78.0 ^d	2,496	3.4
Seattle, WA	78.0	661	72.8	2,843	-5.2
Spokane, WA ^c	77.9	589	74.6	340	-3.3
State College, PA	81.4	584	83.3	713	1.8
Stockton, CA	60.2 ^d	1,128	63.1	1,627	2.8
Tampa, FL ^c	74.9	5,290	68.3	3,364	-6.6
Tucson, AZ	77.4 ^d	3,150	77.3 ^d	3,058	-0.1
Vallejo, CA	76.9 ^d	2,373	76.8 ^d	2,623	-0.2
Ventura, CA ^c	65.2 ^d	538	65.8 ^d	296	0.5
Washington, DC ^b	66.9	64	70.6 ^d	2,662	3.6
West Palm Beach, FL ^c	79.6	3,692	77.3	1,251	-2.3
Williamsport, PA	83.0	666	84.0	873	1.0
Yolo, CA	58.6 ^d	357	76.5	892	17.9

SOURCE: Medicare HEDIS® 1999 and 2000. We first constructed MCO level estimates of the HEDIS indicators within each MSA. We then took the weighted average of the MCO level estimates within each MSA (weighting by the MCO's share in total Medicare managed care enrollment within the MSA). MCOs with 5 or fewer HEDIS observations within an MSA were dropped from the analysis.

^a Includes only female enrollees age 65 to 69 who were continuously enrolled in a Medicare MCO during 1997 and 1998, or 1998 and 1999.

^b Sample size is less than 200 in either 1998 or 1999.

^c Sample size declined by 25 percent or more between 1998 and 1999. Further investigation is required to account for these decreases.

^d For this MSA level enrollment weighted estimate, one MCO within the MSA had fewer than 50 observations and accounted for over 5 percent of total M+C enrollment within the MSA. In addition, the ratio of the MCO's share in M+C enrollment relative to the MCO's share in the number of HEDIS observations exceeded 5.

^e All MCOs withdrew in 2000 and did not report HEDIS® measures for 1999.

NA = Not available. Sample size too small in 1998.

TABLE C.3

DIABETIC EYE EXAM RATES FOR M+C ENROLLEES
IN 69 MSAS NATIONWIDE, 1998 AND 1999

	Eye Exam for Diabetics in the Past Year				Percentage Point Difference (1999-1998)
	1998		1999		
	Percentage of Medicare MCO Enrollees ^a	Sample size	Percentage of Medicare MCO Enrollees ^a	Sample size	
All 69 MSAs	54.1	169,253	62.5	113,062	
Albuquerque, NM	61.1	561	55.7	867	-5.4
Atlanta, GA	45.1	3,131	49.5	2,118	4.4
Bakersfield, CA	63.9 ^d	464	49.4 ^d	885	-14.4
Baltimore, MD	21.1	4,084	52.8	897	31.7
Baton Rouge, LA	49.6	2,451	57.7	1,349	8.1
Boston, MA	66.8	7,954	72.2	1,302	5.4
Boulder, CO ^b	67.4	102	78.2	119	10.8
Chicago, IL	26.3	1,389	50.8	1,341	24.6
Cincinnati, OH	38.7	1,917	50.2	1,360	11.5
Cleveland, OH	55.0	3,190	58.9	2,132	3.9
Colorado Springs, CO	43.0	259	65.5	383	22.5
Dallas, TX	47.2	1,515	35.7	984	-11.5
Daytona Beach, FL	60.3	2,092	18.3	624	-42.1
Denver, CO	57.3	2,539	67.8	1,175	10.5
Detroit, MI	60.8	828	69.5 ^d	1,593	8.7
Dubuque, IA ^b	68.4	19	73.4	68	5.0
Eugene, OR	50.3	1,527	75.6	418	25.4
Fort Lauderdale, FL	56.6	3,772	61.6 ^d	1,810	5.0
Fort Worth, TX	49.9	3,342	59.2	632	9.4
Grand Junction, CO	71.6	689	81.1	222	9.5
Honolulu, HI	85.3	1,560	71.9	1,662	-13.4
Houma, LA	34.0	650	50.0	989	16.0
Houston, TX	44.2	1,274	38.8	2,612	-5.4
Jacksonville, FL	47.2	1,643	51.4	1,588	4.2
Kansas City, MO	55.1	2,271	59.7	1,906	4.5
Killeen, TX ^b	73.4	233	76.4	199	3.0
Las Vegas, NV	33.1	1,571	49.4	3,941	16.3
Los Angeles, CA	57.2	2,669	62.7	3,934	5.5
Medford, OR	67.1	641	77.2	275	10.1
Miami, FL	51.4	8,876	54.4 ^d	2,235	3.0
Minneapolis, MN	56.5	3,393	71.4	1,558	14.9
Modesto, CA	59.2	562	55.5 ^d	863	-3.7
Nassau, NY	56.5	4,987	61.7	938	5.2
New Haven, CT	56.5	4,931	65.7	3,377	9.2
New York, NY	54.2	16,299	69.0	2,520	14.9
Newark, NJ	49.9	943	54.5	1,527	4.6
Norfolk, VA	51.0	1,489	c	c	c
Oakland, CA	58.0	8,749	74.1	7,906	16.0
Olympia, WA ^b	73.9	96	84.0	155	10.0
Orange County, CA	60.0	583	63.7 ^d	1,016	3.7
Philadelphia, PA	60.0	4,239	67.6	4,315	7.7
Phoenix, AZ	49.2	2,003	58.3	2,087	9.1

TABLE C.3 (continued)

	Eye Exam for Diabetics in the Past Year				Percentage Point Difference (1999-1998)
	1998		1999		
	Percentage of Medicare MCO Enrollees ^a	Sample size	Percentage of Medicare MCO Enrollees ^a	Sample size	
Pittsburgh, PA	37.5	9,710	50.5	10,604	13.1
Portland, OR	46.7	2,545	69.6	1,601	22.9
Pueblo, CO	47.4	398	70.6	207	23.2
Riverside, CA	57.5	1,678	55.3	1,518	-2.2
Rochester, NY	NA	NA	80.4	395	80.4
Sacramento, CA	54.5	5,332	75.1	5,026	20.5
St. Louis, MO	19.5	6,950	25.5	882	6.0
Salem, OR	41.2	1,087	70.2	523	29.0
San Antonio, TX	46.8	1,210	57.3	1,494	10.5
San Diego, CA	58.7	1,349	68.2	1,885	9.5
San Francisco, CA	52.7	4,998	72.0	5,052	19.3
San Jose, CA	65.3	4,203	76.8	4,034	11.5
San Luis Obispo, CA ^b	66.5	151	62.0	313	-4.5
Santa Barbara, CA	53.1	580	53.5	674	0.4
Santa Rosa, CA	58.2 ^d	2,278	70.2 ^d	1,501	12.0
Seattle, WA	67.0	925	79.6	1,358	12.6
Spokane, WA	67.1	757	64.1	484	-3.0
State College, PA ^b	70.2	125	71.6	88	1.4
Stockton, CA	54.7	1,093	67.0	1,333	12.4
Tampa, FL	49.7	4,179	37.1	2,613	-12.6
Tucson, AZ	48.1 ^d	2,585	60.7	1,018	12.6
Vallejo, CA	71.6 ^d	2,047	76.9 ^d	1,819	5.3
Ventura, CA	69.4 ^d	546	55.7 ^d	233	-13.7
Washington, DC	30.8 ^d	429	72.2	717	41.4
West Palm Beach, FL	58.4	2,016	64.8 ^d	832	6.4
Williamsport, PA	69.6	312	75.1	350	5.5
Yolo, CA	22.5 ^d	283	64.8	626	42.3

SOURCE: Medicare HEDIS® 1999 and 2000. We first constructed MCO level estimates of the HEDIS indicators within each MSA. We then took the weighted average of the MCO level estimates within each MSA (weighting by the MCO's share in total Medicare managed care enrollment within the MSA). MCOs with 5 or fewer HEDIS observations within an MSA were dropped from the analysis.

NOTE: A large number of individual MSAs experienced substantial declines in sample sizes between 1998 and 1999. Further work is required to account for these decreases.

^aIncludes only enrollees with diabetes who were continuously enrolled in a Medicare MCO in 1998 or 1999.

^bSample size is less than 200 in either 1998 or 1999.

^cAll MCOs withdrew in 2000 and did not report HEDIS® measures for 1999.

^dFor this MSA level enrollment weighted estimate, one MCO within the MSA had fewer than 50 observations and accounted for over 5 percent of total M+C enrollment within the MSA. In addition, the ratio of the MCO's share in M+C enrollment relative to the MCO's share in the number of HEDIS observations exceeded 5.

^eSample size fewer than 10, estimate not reported.

NA = Not available. Sample size too small in 1998.

TABLE C.4

NUMBER OF M+C ENROLLEES AFFECTED BY M+C CONTRACT NONRENEWALS AND SERVICE AREA
REDUCTIONS IN THE 69 MARKET AREAS, 1999–2001

Market Area	1999 ^a			2000 ^b			2001 ^c		
	Number of M+C Enrollees Affected by Nonrenewals	Number of M+C Enrollees Affected by Service Area Reductions	Percent of M+C Enrollees Affected by Nonrenewals or Service Area Reductions	Number of M+C Enrollees Affected by Nonrenewals	Number of M+C Enrollees Affected by Service Area Reductions	Percent of M+C Enrollees Affected by Nonrenewals or Service Area Reductions	Number of M+C Enrollees Affected by Nonrenewals	Number of M+C Enrollees Affected by Service Area Reductions	Percent of M+C Enrollees Affected by Nonrenewals or Service Area Reductions
Albuquerque, NM	0	0	0%	0	0	0%	2,109	0	6.1%
Atlanta, GA	0	6,080	18.6	0	860	2.1	19,166	305	38.2
Bakersfield, CA	441	0	1.5	451	0	1.5	0	0	0
Baltimore, MD	17,387	136	33.7	0	2,612	4.8	44,578	0	90.3
Baton Rouge, LA	2,143	0	10.6	9,090	0	40.9	7,247	0	31.4
Boston, MA	11,252	0	7.8	0	0	0	0	15,783	10.0
Boulder, CO	403	0	4.3	318	1,560	18.3	0	0	0
Chicago, IL	4,811	12,133	13.0	716	0	0.5	6,346	6,001	9.2
Cincinnati, OH	0	2	0.0	0	0	0	22,013	20	43.2
Cleveland, OH	0	3,943	5.2	2,852	1,184	4.8	29,206	601	35.9
Colorado Springs, CO	4,773	1,334	35.3	162	0	1.0	0	0	0
Dallas, TX	3,828	0	7.4	3,093	9,443	19.2	34,212	1,330	58.4
Daytona Beach, FL	0	507	1.3	0	492	1.2	0	0	0
Denver, CO	2,725	3,534	6.9	10,659	0	11.0	425	0	0.4
Detroit, MI	0	0	0	0	0	0	0	90	0.2
Dubuque, IA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Market Area	1999 ^a			2000 ^b			2001 ^c		
	Number of M+C Enrollees Affected by Nonrenewals	Number of M+C Enrollees Affected by Service Area Reductions	Percent of M+C Enrollees Affected by Nonrenewals or Service Area Reductions	Number of M+C Enrollees Affected by Nonrenewals	Number of M+C Enrollees Affected by Service Area Reductions	Percent of M+C Enrollees Affected by Nonrenewals or Service Area Reductions	Number of M+C Enrollees Affected by Nonrenewals	Number of M+C Enrollees Affected by Service Area Reductions	Percent of M+C Enrollees Affected by Nonrenewals or Service Area Reductions
Eugene, OR	0	0	0	0	0	0	0	0	0
Fort Lauderdale, FL	0	0	0	1,698	0	1.4%	3,477	0	2.8
Fort Worth, TX	1,152	0	2.5	692	4,917	10.0%	17,863	357	31.6
Grand Junction, CO	NA	NA	NA	NA	0	0	NA	NA	NA
Honolulu, HI	0	0	0	0	0	0	0	0	0
Houma, LA	6	132	1.8	222	0	3.2%	0	2,415	33.3
Houston, TX	8,194	0	10.2	82	697	0.9%	57,305	17,543	84.4
Jacksonville, FL	4,352	1,721	14.8	0	0	0	8,023	3,868	29.3
Kansas City, MO	0	0	0	2,761	690	6.2%	0	1,788	3.0
Killeen, TX	0	0	0	NA	NA	NA	NA	NA	NA
Las Vegas, NV	0	0	0	9,545	3,219	29.1%	0	0	0
Los Angeles, CA	1,806	0	0.5	478	0	0.1%	11,432	0	3.1
Medford, OR	0	0	0	1,398	0	24.7%	0	3,794	100.0
Miami, FL	0	0	0	0	0	0	1,959	0	1.4
Minneapolis, MN	1,503	2,272	6.8	0	2,823	5.9%	14,159	0	30.0
Modesto, CA	0	0	0	0	0	0	0	0	0
Nassau, NY	6,690	15,659	23.7	0	12,466	12.9%	9,723	29,275	41.6
New Haven, CT	0	5,092	9.4	927	2,138	5.0%	25,276	0	42.5
New York, NY	3,777	19,145	11.3	3,431	4,827	3.9%	3,614	1,730	2.4
Newark, NJ	1,787	658	9.5	1,556	624	7.4	760	212	3.9

Market Area	1999 ^a			2000 ^b			2001 ^c		
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Norfolk, VA	0	0	0	13,809	0	100.0	NA	NA	NA
Oakland, CA	2,610	0	2.4	0	0	0	2,545	445	2.4
Olympia, WA	105	0	1.2	0	0	0	311	0	3.0
Orange County, CA	738	0	0.7	100	0	0.1	2,489	0	2.2
Philadelphia, PA	0	510	0.2	112	0	0.0	0	1,158	0.5
Phoenix, AZ	0	0	0.0	10,811	5,241	9.4	0	0	0
Pittsburgh, PA	0	0	0	0	0	0	2,976	0	2.0
Portland, OR	0	0	0	0	1,015	1.8	0	0	0
Pueblo, CO	0	0	0	464	1,127	19.3	0	0	0
Riverside, CA	916	0	0.5	601	0	0.3	1,477	2,970	2.4
Rochester, NY	0	0	0	0	0	0	0	0	0
Sacramento, CA	715	0	0.8	0	0	0	108	5,685	5.9
St. Louis, MO	0	750	0.9	0	0	0	4,714	2,808	6.6
Salem, OR	0	0	0	0	0	0	0	0	0
San Antonio, TX	4,246	0	7.1	0	172	0.3	3,478	0	5.8
San Diego, CA	867	14	0.5	0	1,646	1.0	0	0	0
San Francisco, CA	2,105	1,533	3.9	0	0	0	9,359	3,318	13.3
San Jose, CA	4,491	0	6.9	0	0	0	2,151	375	3.7
San Luis Obispo, CA	2,662	0	20.5	0	3,581	35.9	0	0	0
Santa Barbara, CA	97	0	0.5	0	0	0	0	0	0

Market Area	1999 ^a			2000 ^b			2001 ^c		
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Santa Rosa, CA	0	40	0.2	0	0	0	0	757	2.6
Seattle, WA	12,369	0	14.2	0	0	0.0	23,309	0	25.2
Spokane, WA	5,698	0	37.7	3,303	3,507	45.6	0	0	0
State College, PA	0	0	0	0	0	0	0	5,578	87.6
Stockton, CA	0	0	0	0	0	0	0	2,093	8.0
Tampa, FL	0	1,085	0.7	2,576	98	1.6	14,749	10,049	15.6
Tucson, AZ	0	0	0.0	3,656	1,580	8.7	11,716	4,083	26.2
Vallejo, CA	0	1,314	6.0	0	0	0	0	0	0
Ventura, CA	253	110	1.2	0	2,195	6.8	0	0	0
Washington, DC	18,839	523	52.2	0	1,409	4.1	9,250	0	30.4
West Palm Beach, FL	0	0	0	1,039	.	1.2	4,414	277	5.5
Williamsport, PA	0	0	0	0	149	1.9	6,873	0	90.2
Yolo, CA	0	0	0	0	0	0	0	0	0

^aBased on M+C Enrollment as of June 1998

^bBased on M+C Enrollment as of June 1999

^cBased on M+C Enrollment as of June 2000

NA = Market had no M+C contracts in previous year.